





SourceBook

Section 9

Sound Reinforcement/PA

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ANCHOR AUDIO

XTREME & LIBERTY SOUND SYSTEMS

AC- and DC-Powered Portable Sound Systems

With a built-in CD player and up to three built-in Anchor Wireless UHF Receivers, the Xtreme and Liberty expands their capabilities beyond any other system in the industry.

An AC-powered sound system, the 130-watt Xtreme delivers a powerful 123dB of crystal clear speech projection—enough to reach crowds of up to 2,500 people. The 50-watt Liberty is a DC-powered system that delivers 117dB of clear sound to crowds of 1000 or more.

With the convenience of a built-in CD player and a wireless microphone, the Xtreme is great for large indoor and outdoor events such as press conferences, sports events, graduation ceremonies, musical productions or any other settings needing powerful and clear voice or music amplification. Rugged, reliable and crystal clear, Liberty is used at the White House for Presidential press conferences,



at thousands of schools around the world, at corporate training centers and on many U.S. aircraft carriers.

Xtreme

- ◆ Clear and powerful sound, thanks to an 8" woofer and constant-directivity horn inside a ported enclosure.
- ◆ Delivers up to 123 dB of clear sound
- ◆ Handles crowds of 2,500 or more.
- ◆ Biamplified; separate high and low frequency amplifiers for enhanced performance.
- ◆ Active limiter—keeps sound clean even when driven hard.
- ◆ The XLR input allows the use of line level or microphone sources, with or without condenser mic power
- ◆ Line-level, balanced output supplies signal to additional sound system
- ◆ Neutrik Speakon connector for use with XTR-6001
- Bass and treble controls
- ◆ Speech projection mode provides crystal-clear voice projection
- ◆ Comes with a hassle-free 6-year warranty

XBP-6000 Xtreme Basic Package:

Includes Xtreme XTR-6000CU1 sound system, built-in CD player and built-in Anchor Wireless UHF with 16-user selectable channels, speaker stand (SS-550) and choice of wireless mic: handheld mic (WH-3000) or body-pack transmitter (WB-3000) and headband mic (HBM-3000) or lapel mic (LM-3000) or collar mic (CM-3000)

XDP-6000 Xtreme Deluxe 2-Speaker Package:

Includes Xtreme XTR-6000CU1 sound system, built-in CD player and built-in Anchor Wireless UHF with 16-user selectable channels. unpowered companion speaker (XTR-6001) two speaker stands (SS-550), 50' cable connection (SC-50NL) and choice of wireless mic: handheld mic (WH-3000) or body-pack transmitter (WB-3000) and headband mic (HBM-3000) or lapel mic (LM-3000) or collar mic (CM-3000)

Liberty

- ◆ Comes with a hassle-free 6-year warranty.
- ◆ Tough, injection-molded case is remarkably durable
- ♦ 8" woofer and titanium dome compression driver in tuned enclosure
- ◆ Features lead-acid batteries and a built-in charger
- ◆ Handles crowds of 1,000 people or more
- ◆ External speaker output powers optional companion speaker
- ◆ Integrated circuit amplifier with short circuit and thermal overload protection
- ◆ Speech projection mode (on/off selectable) provides crystal-clear voice projection





ANCHOR AUDIO

EXPLORER SOUND SYSTEMS

Strong, Full-Range Sound for Crowds Up To 250 People

Explorer is a favorite of audio rental companies and hotels for a quick setup in a conference room. Weighing 20 lbs. this sound system has also traveled the world with missionaries and aboard cruise ships. Delivers a great balance of speech clarity and music fidelity. (A battery-powered model is also available.)

- ◆ Heavy-duty amp and full-range speaker system deliver fidelity sound
- ♦ 6.5" woofer coupled with a high-output horn tweeter
- ◆ Simple to set up and operate
- ◆ Durable injection-molded polypropylene case
- ◆ Short circuit and thermal overload protection
- ◆ Weighs less than 20 pounds
- ◆ Speaker output to power companion speakers
- ◆ Comes with a 6-year warranty



EBP-2500 Explorer Basic Package:

Includes Explorer PA-2500W sound system, (SS-550) speaker stand and choice of wireless mic: (WH-58) Shure handheld mic or (WB-II) body-pack transmitter and (HBM-60) headband mic or lapel mic (LM-60) or collar mic (CM-1000).

EDP-2500 Explorer Deluxe Package:

Includes Explorer PA-2500W sound system, Explorer P-2501 companion speaker, two (SS-550) speaker stands and choice of wireless mic: (WH-58) Shure handheld mic or (WB-II) body-pack transmitter and (HBM-60) headband or lapel mic (LM-60) or collar mic (CM-1000).

MegaVox PA System

Police, firemen, coaches, FBI agents, Marine drill sergeants, auctioneers, all choose the MegaVox. This PA system delivers an amazing 126dB of clear speech projection that can operate for up to 10 hours on a charge. Incorporating a rechargeable battery, this unit weighs just 15 lbs. and is available with wireless microphone for convenient field operation.

- ♦ Injection-molded case
- ◆ High-efficiency re-entrant horn driver
- ◆ Speaker output powers optional companion speaker
- ◆ Built-in wireless microphone receiver



- Powerful amplifier and horn driver combine for 126 db output
- ◆ Runs up to 10 hours on a charge
- ◆ Speaker stand receptacle molded into bottom
- ♦ 6-year warranty

MEGA-BP MegaVox Basic Package: Includes MegaVox with built-in 2-channel selectable wireless receiver, (SS-550) speaker stand and choice of wireless mic: (WH-1000) handheld mic or (WL-1000) body-pack transmitter and (HBM-40) headband mic

MEGA-DP MegaVox Deluxe Package: Includes MegaVox with built-in 2-channel selectable wireless receiver, MegaVox P-351 unpowered companion speaker, (SC-50) 50" cable connector and two (SS-550) speaker stands and choice of wireless mic: (WH-1000) handheld mic or (WL-1000) body-pack transmitter and (HBM-40) headband mic.

AN-100 Sound Systems

AN-100 packages are the perfect choice for classrooms small conference rooms and corporate road warriors who rely on their sound systems to command the audience. Plus, it's the perfect companion for a video projector. The AN-100 produces



such accurate sound that it is used by movie studios to hear their mix on the master sound tracks. Weighing in at just 8.5 lbs. this powerful sound system is designed for audiences up to 100 people.

- ◆ 25 watt amplifier provides lots of sound.
- ◆ 2-way speaker system combines 4.5″ woofer and dome tweeter
- ◆ Durable injection-molded case
- ♦ 6 year warranty
- ◆ Magnetically shielded speaker.
- ◆ Has mic, instrument & 2 line inputs
- ◆ Built-in two selectable channels RF wireless receiver

AN-100:

AN-100 all by itself with nothing else. Just plug in a microphone or the video projector cables, and you're ready to go.

AN-100BP AN-100 Basic Package:

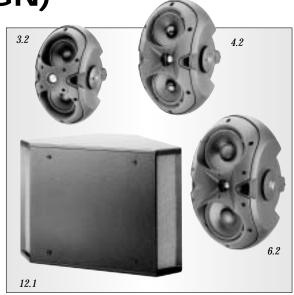
Includes AN-100 Wireless VHF Receiver and choice of wireless mic: (WH-1000) handheld mic or (WL-1000) body-pack transmitter and (HBM-40) headband mic



EVID (EV INNOVATIVE DESIGN)

Premium Surface Mount Speaker System

The EVID concept means innovation. From it's unique, superior design to its innovative acoustical integrity, EVID delivers value, performance and ease-of-use to the contractor and end listener alike. In designing EVID, Electro-Voice evaluated all the current products available and asked contractors and typical end users, "What do you want?" End users wanted something attractive and superior sounding amidst a world of plain black boxes. Contractors wanted a comprehensive line that would provide flexible choices for easier system design and installations. EVID achieves these goals. The result is a comprehensive background/foreground speaker line with the key characteristics installers need and users want. Why settle for anything else?



FEATURES

- ◆ Cast aluminum Strong-Arm-Mount (SAM) system provides excellent strength and reliability
- ◆ Dual woofers for extended bass, greater power handling and output
- ◆ Coherent coverage Waveguide Horn design on models 4.2 and 6.2
- Dual low frequency ports provide extended bass output
- ◆ Treated woofer cones for added weather resistance and increased reliability
- ◆ Over 100° of swing and 45° of rotation for incredible installation flexibility
- ◆ Titanium dome tweeters with Neodymium magnet structures provide clean highs and added weather resistance
- ◆ One-piece ABS cabinet provides outstanding strength and acoustic rigidity
- ◆ Durable zinc-plated steel grille
- ◆ Simple keyed hex head adjustments make installations quick and easy
- ◆ Smooth lines and innovative cosmetic design complement any décor or environment
- ◆ Magnetically shielded transducers allow placement close to sensitive equipment

3.2 Very Compact Full-Range Speaker System

Loaded with dual 3.5" LF drivers and a 3/4" Ti direct radiator, the EVID 3.2 produces sound that defies its small size. Its unobtrusive profile is ideal for background music and paging support in a wide variety of environments (e.g., offices, retail stores, restaurants, etc.) Coupled with the 12.1 Subwoofer, two to four EVID 3.2 speakers deliver amazing SPL levels for foreground music.

4.2 Compact

Full-Range Multi-Use Speaker System

Perfect for a variety of environments where full-range audio is needed but space is limited: restaurants, bars, bistros, department stores, and outdoor venues. Offering the bass response of a much larger speaker, dual 4-inch woofers make the 4.2 a phenomenal performer. The 1" waveguide coupled titanium tweeter delivers controlled clean mids and highs. Combine it with the 12.1 Subwoofer for an amazing listening experience. Full system protection and EV's unique Strong-Arm-Mount (SAM) make the EVID 4.2 a solid choice in any environment.

6.2 Extended-Range High Output Speaker System

Comprised of dual 6" LF drivers and a 1" Ti/waveguide, the EVID 6.2 is perfect for applications that require exemplary audio and the capability to fill large areas with sound. Additionally, the flexible Strong-Arm- Mount (SAM) system provides the versatility to accommodate any installation challenge. EV's unique 6" dual woofer design delivers crisp and clean program for the utmost in listening experience regardless of the location. Great for larger areas that demand higher SPL levels, the 6.2 delivers the outstanding, full bass output required for shopping malls, stadiums, airports, etc.

12.1 Dual Input Subwoofer

To augment and extend the low frequency response of any full-range models, an attractive and powerful subwoofer completes the EVID line. The 12.1 provides an easy installation by incorporating dual voice coils to handle both channels of a stereo pair. In addition, the unit can power up to four satellites with its four crossed-over audio outputs on the back panel. For extended bass performance in demanding installations.



EVID (EV INNOVATIVE DESIGN)



SOS 3.2 Monitor Speaker Mic Stand Personal Monitor

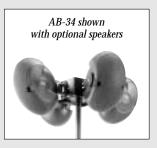
The EVID SOS 3.2 is a new approach to personal monitors! Its unique design enables the use of only one stand for the microphone and monitor. It frees up stage space and puts the monitor closer to the performer for additional clarity. The SOS 3.2 features a 1/4" input connector for easy connection to the amplifier. In addition, the performer can precisely adjust the speaker volume level using the L-Pad adjustment on the back of the unit. The compact design of the SOS 3.2 makes it unobtrusive on stage and easy to pack and carry. The SOS 3.2 package includes the SOS 3.2 speaker, all stand mounting adapters and a shock mount clip ready for use on your favorite boom-mount mic stand.

EVID ACCESSORIES

AB-34

AB-34 and AB-64 360° Mounting Bracket Kits

AB-34 and AB-64 series kits feature a 4-sided powder coated steel mounting assembly that allows the mounting of 4 EVID speakers into a 360 degree pattern array configuration. The mount offers additional flexibility in your EVID system designs. The AB-34 works with the EVID 3.2 series and



can be used with a threaded rod for suspension from the ceiling. The AB-64 is used with the EVID 4.2 or 6.2 series speakers and can be used with a speaker stand tripod or hung from the ceiling using a threaded rod. All necessary accessories and parts needed for use are included.

AB-32 and AB-62 180° Mounting Bracket Kits

AB-32 and AB-62 series kits feature a
2-sided powder coated steel mounting
assembly that allows the mounting of 2
EVID speakers into a 180 degree pattern
array configuration. The AB-32 works
with the EVID 3.2 series and can be used
with a threaded rod for suspension from the
ceiling. The speakers can then be positioned on the bracket to
cover a variety of patterns to best serve the installation require-



ments. The AB-62 allows the EVID 4.2 or 6.2 series speakers to be used with a speaker stand tripod or hung from the ceiling utilizing a threaded rod. All necessary accessories and parts needed for use are included.

HS-3 Horizontal Tabletop Stand

The HS-3 horizontal tabletop stand allows the EVID 3.2 or 4.2 to sit on a table, meter



bridge, desk, bookshelf or other flat surface. Ideal for portable applications, the stands are made of steel for strength and durability and include rubber feet to protect surfaces. Sold in pairs.

VS Series Vertical Tabletop Stands

VS series vertical tabletop stands are available for any EVID full range model. The stands allow the hassle-free vertical orientation of EVID speakers on a table, desk, bookshelf or other flat surface. Ideal for portable applications, the stands are made of plastic coated steel for strength and durability. Sold in pairs.



TC Series Terminal Covers

TC-4 and TC-6 terminal covers protect the input connections on EVID speakers from the long-term effects of moisture. The covers are available for the EVID 4.2 and 6.2 speakers. The covers easily attach to the rear input panel of the speaker and include a weatherproof cable connector.



MA-3 Mic Stand Adapter

The MA-3 microphone stand adapter allows use of the EVID 3.2 with a standard boom mount mic stand. This unique kit includes adapter pieces for both the mic stand and boom sections. These adapter pieces allow a solid and secure junction between the microphone

boom on one side and microphone stand side on the other.



Sx-SERIES

Speaker Systems

Designed by the company who pioneered the concept and use of injection-molded structural foam enclosures to make compact speaker systems lighter and stronger, the Sx-Series provides outstanding performance and flexibility in cabinets designed for portable and permanent installation applications. Featuring a wide range of models—from 8-inch two-way to 15-inch two-way systems—to meet your specific requirements, each is equipped with PRO driver protection circuitry and RMD for level-independent fidelity and incredible vocal reproduction. Sx-Series speakers weigh as little as 18 lbs. and have power capacities up to 400 watts. Molded-in attachment points and optional mounting and arraying brackets make them ideal for a wide variety of small-to mid-size portable or fixed applications.

Using exclusive EV manufacturing processes and quality control measures, the Sx-Series far surpass normal industry standards. Designed for musicians, DJs, performers and presenters in clubs, smaller auditoriums, churches and theaters, Sx-Series systems are used at the House of Blues in Las Vegas and have been used at prestigious events such as ShoWest and the Sundance Film Festival.

Ring-Mode Decoupling (RMD), the same technology that gives the EV X-Array concert touring series its incredibly clean and powerful performance has been applied to all SX-Series and components. This gives the SXseries precise speaker intelligibility and true dynamic integrity independent of volume levels by virtually eliminating distortion caused by spurious component vibrations.

Each SX-Series speaker system is created with a precise driver, horn and woofer combination. Pure titanium-diaphragm compression drivers with Time Path phase plug and Resonant Drive technology are coupled to **EV-exclusive Constant Directivity HF horns** with VariPath throat geometry for silky smooth, extended response, plus detailed and accurate highs.

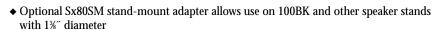
Sx-Series woofers were developed to complement the performance of the high-frequency section. Sx-Series woofers use a cone material with extremely high internal damping for suppression of unwanted resonances and feature beryllium-copper lead wires, low-mass, edge-wound voice coils and cast-frame aluminum frames for the highest sound quality and rock-solid reliability. And the performance of the Sx-Series speakers is protected with EV's proprietary PRO circuit that prevents the compression drive from being damaged if a dangerous condition occurs.

Sx80

The Sx80 is a compact, high efficiency, constant directivity speaker system for sound reinforcement and monitoring. The small size, high sensitivity and high power-handling capacity of the Sx80 make it an excellent choice for use in studios, clubs, bars theaters or other applications.

- ◆ Two-way 8" system with 175 watts continuous, 700 watts peak power handling
- ◆ EV DH2005 pure titanium compression driver for great sound and reliable performance
- ◆ 90° x 65° constant-directivity high-frequency
- ◆ Ring-Mode Decoupling for superior vocal reproduction and smooth, accurate vocals and mids





Sx80B (Black)

Sx80B (#11483160):

Push-terminal connectors, flying and stand mount (with Sx80SM adapter), paintable black polystyrene

Sx80BE (#11483254): Sx80B with Neutrik Speakon connector

Sx80BP (#11483253): Sx80B with 1/4" connector

Sx80TB (#11483162): Sx80B with internal 70.7/100-volt, 60-watt transformer (60-, 30-, 15-, 7.5-, 3.8- and 1.9-watt taps)

Sx80W (White)

Sx80W (#11483161):

Push-terminal connectors, flying and stand mount (with Sx80SM adapter), paintable white polystyrene

Sx80WE (#11483256): Sx80W with Neutrik Speakon connector

Sx80WP (#11483255): Sx80W with 1/4" connector

Sx80TW (#11483163): Sx80W with internal 70.7/100-volt, 60-watt transformer (60-, 30-, 15-, 7.5-, 3.8-and 1.9-watt taps)

Sx80P (Weather Resistant)

Sx80PI (#11483164): Weather resistant version of Sx80B

Sx80PIX (#11483169): Same as Sx80PI with internal 70.7/100-volt 60-watt transformer (60-, 30-, 15-, 7.5-, 3.8- and 1.9-watt taps



Sx-SERIES

The term versatility is testament to the inherent design considerations of the Sx-Series. A high performance Sx cabinet using wall mount accessories can cover an audience. The same cabinet using adapter hardware becomes an unbeatable low-profile stage monitor for a rock band. They meet the needs of both musicians and audio engineers by offering adjustable stand mounts and stacking footprints built-in to service various portable setups. Comfortable carrying handles assist in moving Sx systems from job to job. Industry-standard rigging and hanging accessories accommodate any application from concert sound to a local church. To satisfy the demands of professional installations, the Sx full-range systems are available in weather-resistant packages with or without transformers.

Sx100+

The Sx100+ is a compact 12" two-way system with 200 watts continuous, 800 watts peak power handling. Durable polypropylene enclosure is light and very strong.

- ◆ 65° x 65° constant-directivity horn has excellent projection capability and allows the system to be used vertically or horizontally with identical coverage
- ◆ Ring-Mode Decoupling delivers smooth, accurate vocals, instruments and mids.

 Sound quality remains even over a wide dynamic range.
- ◆ Rubber feet attached to the bottom of the cabinet and mating sockets molded into the top provide a means of stacking systems
- ◆ Built-in stand mount and inserts accept a wide range of accessories to allow safe suspension, arraying and use as a floor monitor

Sx100+ (#11053282): 1/4″ connectors, flying and stand mount, black **Sx100+E** (#11053314): Sx100+ with Neutrik Speakon connectors **Sx100+W** (11053285): Same as above in white polypropylene



Sx250

Only 40 lbs. the Sx250 is designed for applications that require the warmer low end that its 15" woofer provides while maintaining small size and light weight. Multi-angle enclosure allows use in different sidefill and floor monitor orientations

- ◆ 15" two-way speaker system with 350w continuous, 1,400w peak power handling.
- ◆ 80° x 55° constant-directivity horn has better projection capabilities than 90° horns
- ♦ High-performance EV DL15BFH cast-frame woofer and DH2010a pure titanium compression driver
- ◆ Ring-Mode Decoupling delivers rich, smooth vocals and accurate, detailed mids
- ◆ Dual Neutrik Speakon connectors for loss-free signal transfer
- ◆ Built-in metal socket allows mounting on a pole or speaker stand
- ◆ Built of 18 mm plywood and finished in black Futura, a sprayed-on polyurethane finish that is very rugged
- ◆ Optional SK-1 hardware kit makes flying the Sx250 vertically safe, easy and cost-effective

Sx250 (#301253001): Flying and stand mount, black Futura

Sx300 +

The Sx300 is a 300-watt, 12 $^\circ$ two-way, high-efficiency, constant-directivity compact speaker system with Ring-Mode Decoupling (RMD). The high-frequency section utilizes a molded-in, 65 $^\circ$ x 65 $^\circ$ constant-directivity horn. This unique pattern contributes to high intelligibility. Vocals sound natural yet "cut through" in reverberant, noisy rooms.



- ◆ The world's best lightweight, high-power speaker system with 300w continuous, 1,200w peak power handling. Delivers over 125 dB continuous, 131dB peaks at full power.
- ◆ Constructed of high-impact polypropylene structural foam, the cabinet provides a stiff and extremely durable enclosure.
- Integral carrying handle and a stand socket for mounting on 1%" stands such as the EV 100BK. Rubber feet and mating sockets provide a means of stacking systems.
- ◆ 65° x 65° constant-directivity horn allows vertical or horizontal use with identical coverage. Delivers better pattern control and projection than typical 90° horns
- ◆ Trapezoidal-shaped cabinet, in combination with uniform, 65° x 65° directivity, make the Sx300 ideal for use alone or in arrays.
- ◆ Proven, reliable EV components including DL12BFH cast-frame 12″ woofer and DH2010a pure titanium compression driver
- ◆ EV PRO Circuit protects the compression driver from damage if a dangerous condition occurs.
- ◆ Built-in stand mount and inserts in enclosure allow the system to be safely suspended and arrayed using a wide range of optional hardware. Can also be used as a floor monitor with F200 attachment

Sx300E (#11053031): 300-watt 12° two-way, 65° x 65° , Neutrik Speakon connectors, flying and stand mount, black polypropylene

Sx300P (#11053030): Same as above with 1/4" connectors

Sx300PI~(#11052991): Weather resistant (including full grille) version of the Sx300E

Sx300PIX (#11052992): Weather resistant (including full grille) model with internal 70.7/100-volt, 100-watt transformer, black polypropylene

Sx300WE (#11053029): Sx300E in white polypropylene

 $\boldsymbol{Sx300WP}$ (#11053032): Sx300P in white polypropylene



Sx-SERIES

Sx500+

The Sx500+ is a 400-watt, 15" two-way, biampable, high-efficiency constant-directivity speaker system featuring a vented-horn woofer section.

- ◆ Two-way 15″ full-range system with 400w continuous, 1,600w peak power handling
- ◆ DL15SX 15-inch woofer and large enclosure volume extend and increase bass output
- High-frequency horn is driven by the DH2T one-inch throat, wide-bandwidth, titanium-diaphragm driver.
- The driver uses a unique, convex-drive TimePath phasing plug structure for smooth and extended high-frequency performance.
- ◆ Dual Neutrik Speakon high-current connectors
- ◆ PRO circuit for high frequency driver protection
- Ring-Mode Decoupling (RMD) technology for increased intelligibility

- ◆ Asymmetric 75° x 60° constantdirectivity HF horn aims down 10° – helps direct sound at the audience when vertically stand mounted
- ◆ Horn loading of the woofer controls the coverage pattern down to 500 Hz– unheard of in a product of this size– for higher vocal intelligibility and musical clarity. Also provides more bass punch at greater distances than conventional front-loaded woofers



- ◆ Attachment points for secure suspension with optional brackets
- Mb600 and horizontal array kits available for side-by-side arraying of two systems (requires one Mb500 wall/ceiling bracket per speaker)

Sx600PI / Sx600PIX



Weather-resistant indoor/outdoor speaker, the Sx600PI is ideal for applications requiring high intelligibility sound at high SPL's such as arenas and stadiums. The Sx600PIX adds an internal 600-watt line transformer for operation on 70, 100, 140 and 200v distributed line sys-

- Dual 12" two-element vertical array based on a powerful Neodymium woofer.
- HF section features a DH2T compression driver coupled to a molded-in 65° x 65° constant directivity horn using EV's Varipath throat geometry.
- Exclusive SuperSAM mounting system allows 60° of vertical adjustment and 180° of horizontal pan with simple adjustment.
- Molded polymer enclosure combined with aluminum & neodymium components provide a lightweight, easy to handle system.
- Multilayer stainless steel grille protects against rain, sprayed water, dust, humidity and salt spray to military and environmental grade specifications.

\$B121 300-Watt 12" Subwoofer



The Sb121 is a compact, lightweight subwoofer designed to add bass enhancement to Sx Series speakers. The Sb121 combines a long-throw 12" woofer with a lightweight, yet strong polypropylene enclosure. The Sb12 woofer has a specially designed deep frame geometry with a magnetic structure optimized to yield the best possible combination of performance and output capable in this enclosure size. Its Kevlar composite cone and special surround give it nearly 2 inches of total excursion capability. The Sb121 can handle 300w continuous, 1200w peak and can be safely used with amplifiers in that

power range, as long as they are not driven to clipping. Using 1/2 or 1/4-space loading as well as mutually coupling multiple Sb121's give this small box very impressive output capability. The Sb121's parallel Neutrik Speakon connectors allow loss-free signal connection. The enclosure can be stacked, stand-mounted and safely suspended using a variety of flexible, inexpensive optional hanging kits.

- ◆ 12″ low-frequency system with 300 watts continuous, 1200 watts peak power handling
- Very durable polymer enclosure can be safely suspended
- ◆ Integral handle makes lifting easy
- Dual Neutrik Speakon high current input connectors
- ◆ Cast-frame 12" woofer with Keylar reinforced cone

- ◆ Adds bass impact and range to systems using Sx80, Sx100+ or Sx300 speaker systems
- ◆ Black polypropylene enclosure is light, strong and non-resonant
- Accommodates Mb100 / Mb200 / Mb300 hardware accessories for safe, cost-effective hanging and arraying
- ♦ Built in pole mount
- ◆ Compact and lightweight, weighs only 32 lbs.











SX AND SB SERIES

Sx/Sb System Accessories

100BK: Speaker stand for speakers with integral stand mount or any system up to 110 lbs (1-3/8" shift diameter), black

F200: Pair of monitor feet for Sx100+/300 **Mb100:** Forged eyebolt attachment kit for Sb121, Sx100/300, black

Mb200: Wall/ceiling U-bracket kit for Sb121, Sx100+ and Sx300, black

Mb200W: Same as above in white

Mb300: Kit for side-by-side arraying of two Sb121, Sx100+, Sx300 (Mb300 one Mb200 U-bracket kit per speaker system), black

Mb300W: Same as above in white

Mb500: Wall/ceiling U-bracket for Sx500+, black

Mb600: Kit for side-by-side arraying of two Sx500+'s (Mb600 requires one Mb500 U-bracket kit per speaker system), black

Mb700: Forged eyebolt attachment kit (set of three) for a single Sx500, black

PD500: Padded case for Sx500+

PDSx: Padded case for Sb121, Sx100+ and Sx300

SK1: Suspension kit for Sx250

Sx80MBB: Wall/ceiling U-bracket kit for

Sx80, black

Sx80MBW: Same as above in white

Sx80SM: Stand-mount adapter for Sx80

VPC500: Vinyl cover for Sx500+

VPCSx: Vinyl cover for Sb121, Sx100+ and Sx300

\$B180 600-Watt 18" Subwoofer

The Sb180 is a 600-watt subwoofer which combines the attributes of both horn-loaded and vented-box designs. It utilizes the unique SubScoop cabinet construction with a EVX-180B woofer, as used in the X-Array concert systems. The design behaves like a horn over much of its range, but without the time delay and weight problems usually associated with conventional designs. Vented-box principles take over for the lowest octave and assist in producing exceptionally high levels of clean, punchy bass from a sub-compact box. The reverse woofer orientation has been used to optimize the rear chamber volume and decrease the horn flare rate for extended low-end

performance. The Sb180 will augment the bass performance of any EV stage system. A 1%" stand-mount receptacle on the top of the Sb180 allows satellite speaker systems such as the Sx500 and Sx300 to be used. A 34" mounting pole is also included.

- ◆ Concert-proven EVX180B woofer with 4″ voice coil has unsurpassed long-term fatigue resistance for excellent reliability and incredible response to 31 Hz
- Rugged, road-ready cabinet, metal grille.
 Enclosure is built with 18mm plywood and is finished in Futura, a sprayed-on polyurethane finish that is very rugged.
- ◆ SubScoop enclosure combines the extended response of a vented box and the projection and punch of a horn-loaded system

- ◆ Natural high-frequency roll-off
- ◆ 600-watt continuous, 2,400 watts peak power handling
- ◆ Dual Neutrik Speakon inputs
- ◆ 1%" stand mount on top allows use of satellite system.
- ◆ Includes 34″ long mounting pole for elevating satellite speakers.
- ◆ Only 23.75″ tall, includes metal handles for ease in transportation

	Sx80	Sx100+	Sx300	Sx250	Sx500+	Sx600PI
Frequency Range (-10 dB)	51 Hz - 20 kHz	55 Hz - 20 kHz	55 Hz - 20 kHz	50 Hz - 20 kHz	43 Hz - 16 kHz	100 Hz - 18 kHz
Recommended High-Pass Frequency	51 Hz	(12 dB/Oct.) 55 Hz	(12 dB/Oct.) 55 Hz	(12 dB/Oct.) 45 Hz	(12 dB/Oct.) 43 Hz	(12 dB/Oct.) 80 Hz
Axial Sensitivity SPL 1W/1m (Biamp mode)	92 dB	98 dB	100 dB	99 dB	100 dB (100/107 dB)	105 dB
Max. SPL / 1m (calc.); full space	121 dB, (100V: 110 dB)	127 dB	131 dB, (100V: 123 dB)	130 dB	132 dB	138 dB
Continuous Power Handling (low Z)	175 W, (60 W/100V)	200 W	300 W, (200 W/100V)	350 W	400 W	600 W
Coverage (nominal -6 dB) H° x V°	90° x 65° (CD Horn)	65° x 65° (CD Horn)	65° x 65° (CD Horn)	80° x 55° (CD Horn)	75° x 60° (Asym. CD Horn)	65° x 65°
LF Driver	8″	12″	12" (DL12Sx)	15" (DLH15BFH)	15" (DLX155X)	2 x 12"
HF Driver	1" (DH2005)	1" (DH2010A)	1" (DH2010A)	1.25" (DH2010A)	2" (DH2T)	1″
Crossover Frequencies (slope in Biamp mode)	2,200 Hz	1,500 Hz	1,500 Hz	1,600 Hz	1,600 Hz (24 dB/Oct.)	1,800 Hz
Nominal Impedance (non-transformer)	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	4 Ω
Minimum Impedance (non-transformer)	7.2 Ω	5.6 Ω	6.0 Ω	7.5 Ω	5.2 Ω	$3.5~\Omega$
Dimensions (H x W at front x D)	15.75 x 11.5 x 8.75″	23.1 x 17 x 12.3″	23.1 x 17 x 12.3″	24.6 x 17 x 12.3″	33 x 26.5 x 17.63"	45.8 x 17 x 12.3″
Net Weight	18 lbs.	32 lbs.	39 lbs.	40 lbs.	69 lbs.	80 lbs.



EV

SxA-SERIES

Self-Powered Speaker Systems

If you need solid, clean powerful audio in the lightest package possible, direct your ears to the SxA-Series. These self-powered speakers work well in a wide range of sound reinforcement applications, from a simple vocal reinforcement PA to a large, multi-box, high-SPL sound system.

The SxA100+ and SxA250 full-range systems set new performance standards for powered speakers. They provide multiple inputs with full mix capability, a flexible EQ section and plenty of power in compact, easy-to-move enclosures. They make setting up a high-performance sound system quick and easy.

The compact SbA750 and full-size SxA180 powered subwoofers add hard-hitting bass to the SxA or other full-range systems.

SxA100+/SxA250 Powered Speakers

Full range loudspeaker ideal for most applications requiring high-quality sound. Their design provides multiple inputs with mix capability, an easy to use EQ section, and plenty of power in very compact, attractive packages.

- ◆ Designed to provide high SPL without excessive heat, the high quality mic preamp provides great sounding vocals or speech. A master level control sets the desired SPL, and the line input can be mixed and balanced with a mic with its level control.
- ◆ Linear response is easily optimized for speech or music with the on board multiband equalization.
- ◆ Built-in pole mount and optional hardware makes it easy to position them without expensive accessories.
- ◆ High frequency section utilizes a molded-in 65° x 65° and 80° x 55° constant-directivity horn coupled to a DH2010A. The result is vocals that sound natural yet "cut through" in reverberant, noisy rooms.

SbA750 15" Powered Subwoofer

The SbA750 is a high-power compact sub designed to match the SxA100+ and SxA250. The state-of-the-art class H power amplifier module delivers 750 Watts RMS power to an EV DL15Y 15" woofer. The patented LPN (Low-Pass-Notch) filter compensates for transient distortion of dynamic signals and allows, in combination with the PowerMax 12 crossover filter, the SbA750 to achieve a higher acoustic output than expected from a compact cabinet that size.

SxA180 18" Powered Subwoofer

- ◆ Built-in crossover with Linkwitz-Riley filters continuously variable from 90 -125 Hz
- ◆ Built-in storage compartment with ample room for cables and included 34" pole
- ◆ Detachable transport dolly with 4 heavy-duty casters
- ◆ Active balanced XLR-type input and outputs for both filtered and unfiltered signals

	SxA100+	SxA250	SxA180	SBA750
Frequency Response (-10 dB)	50 Hz - 20 kHz	55 Hz - 20 kHz	38 - 120 Hz	45 - 150 Hz
Rated Output Power long term	LF150 W/HF 50 W	LF150 W/HF 50 W LF	650 W	750 W
Rated Output Power 10 ms. burst	LF350 W/HF 80 W	LF350 W/HF 80 W	LF 300 W	
Max. Sound Pressure Level	124 dB	126 dB	126 dB	128 dB
HF Coverage (nom.)	65° x 65°	80° x 55°	_	_
LF Components	12″ woofer	15" woofer	18" woofer	15″ woofer
HF Components	DH2010A	DH2010A	_	_
Inputs	XLR Mic XLR/1/4" Line Level XLR out (slave)	XLR Mic XLR/1/4" Line Level XLR out (slave)	XLR Line Level XLR out	2 x XLR/jack combo 2 x XLR slave through 2 x XLR Mid/Hi out
Level Controls	Mic Level (-35 dBu to 0 dBu) Master Level (- ∞ to 0 dB)	Mic Level (-35 dBu to 0 dBu) Master Level (- ∞ to 0dB)	Master Level (- ∞ to +10 dB)	
2-Band EQ	LF: ± 6 dB; HF: ± 4 dB	LF: ± 6 dB; HF: ± 4 dB	_	_
Dimensions (HWD)	23.1 x 16.9 x 12.3"	24.6 x 17.9 x 13.1"	31.5 x 21 x 23.5″	23.7 x 16.9 x 26.2"
Net Weight	43 lbs.	49 lbs.	88 lbs.	94.7 lbs.

FBTMaxX

Powered Speaker Systems

The new generation of FBTMaxX speakers is made of polypropylene with gas injection molding, producing an ultra-light FBT product that is extremely sturdy. The special design, coupled curves and rounded edges, permits multi-functional application in all audio-professional application systems: such as stage monitors, for wall or ceiling installation and with special adapters to stack the enclosures. Special attention has been paid to the accessibility of controls in all conditions of use. FBTMaxX is the perfect marriage of power, mechanics and leading-edge technology.



FBTMaxX 2A

- Extremely light and sturdy enclosure made of polypropylene with gas injection molding
- ◆ 200-watt RMS 10″ low frequency woofer with a Neodymium magnet and die-cast aluminum frame, and a 50-watt RMS 1″ high frequency compression driver with Titanium diaphragm coupled to a custom-designed constant directivity 90° x 60° horn.
- ◆ The control panel designed for accessibility under all operating conditions, features both Neutrik XLR and 1/4" inputs, mic/line switch, and ground lift switch. Volume control, variable gain control, 3-band EQ, and LED clipping indicators are also provided.
- ◆ Incorporates ADAP (Advanced Dynamic Active Protection) Processor for total protection of the LF & HF drivers and a 24dB/oct active crossover filter.
- ◆ Frequency response is 50Hz to 20kHz and it will handle 250 watts @ 8 ohms.
- ◆ The built-in ergonomically designed carry handle allows for a "balanced" feel when transporting.
- ◆ Built-in stacking adapters enable cabinet stacking and two M-10 flying points for wall or ceiling mounting, either vertically or horizontally, as well as a standard 1%″ speaker socket for speaker stand mounting.

FBTMaxX 4A

Same as FBTMaxX 2A except:

- ◆ 300w RMS 12" LF woofer with a Neodymium magnet, die-cast aluminum frame, and a100w RMS 1" HF compression driver with Titanium diaphragm coupled to a custom constant directivity 90° x 60° horn.
- ◆ Frequency response is 50Hz to 20kHz and it will handle 400 watts @ 8 ohms.
- ♦ Four M-10 flying points

FBTMaxX 6A

Same as FBTMaxX 4A except:

◆ 700w 15″ LF woofer with a Neodymium magnet and die cost aluminum frame as

• 700w 15 LF wooter with a Neodymium magnet and die-cast aluminum frame, and a 200w RMS Class G high frequency compression driver with Titanium diaphragm coupled to a custom-designed constant directivity 90° x 60° horn.

FBTMaxX 9SA

- ◆ 900 watt RMS 15" dual coil low-frequency woofer with a Neodymium magnet and die-cast aluminum frame.
- ◆ Frequency response is 40Hz to 125Hz and it will handle 400 watts @ 8 ohms.
- ◆ Two M-10 flying points for wall or ceiling mounting, either vertically or horizontally, as well as a standard 1-3/8" speaker socket for speaker stand mounting.
- ◆ Control panel features left and right channel inputs with a built-in crossover, both input channels with XLR/Neutrik input, XLR Neutrik link connectors, XLR high pass filtered output and volume control.

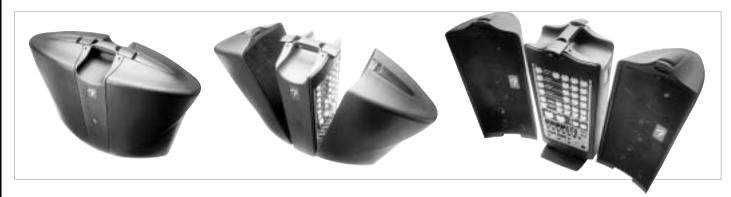
	ACT	IVE VERSION		
	FBTMaxX 2A	FBTMaxX 4A	FBTMaxX 6A	FBTMaxX 9Sa
LF Driver	10"	12″	15"	15″
HF Driver	1"	1"	1.4"	_
Built-in LF amplifier	200W	300W	700W	900W
Built-in HF amplifier	50W	100W	200W	_
Frequency Response	50 Hz - 20 kHz	50 Hz - 20 kHz	40 Hz - 20 kHz	40 Hz - 125 kHz
Sensitivity@1W/1m dB	97	98	98	97
Input Impedance	22kΩ	22kΩ	22kΩ	22kΩ
Max. SPL	121dB	123dB	128dB	126.5dB
Dimensions	13.9 x 21.7 x 12.1"	16 x 25 x 13"	19 x 29.9 x 15.7"	19.5 x 25.5 x 19.1"
Net Weight	28.6 lb.	35.3 lb.	72.8 lb.	64 lb.
	PASS	SIVE VERSION		
	FBTMaxX 2	FBTMaxX 4	FBTMaxX 6	FBTMaxX 9S
Power Handling	250W	300W	700W	900W
Impedance	4 or 8Ω	4 or 8Ω	4 or 8Ω	4Ω
Net Weight	22 lb.	28.6 lb.	64 lb.	57.3 lb.



FENDER

PASSPORT SYSTEMS

Complete Self-Contained Portable Sound Systems



The innovative Passport Sound Systems are truly portable PA system. Designed with simplicity, flexibility, versatility, reliability, easeof-use, and efficiency in mind, each Passport system is ideal for working musicians, acoustic groups, club and lounge performers, school and day-care teachers, coaches, auctioneers, religious organizations, aerobics instructors, corporate educational presenters anyone or any application that requires a portable audio sound system that sets up easily and quickly (in under 5 minutes!). The truly remarkable aspect of a Passport Audio System design is that for all their high-tech technology, you don't have to be a sound engineer to get professional quality sound. Fender has incorporated years of pro audio experience into the Passport Systems' unique design and powerful features. These include proprietary elements like Vocal Input Priority circuitry that automatically lowers all other signals in the system when you speak into the microphone –(particularly useful when you want to make an announcement over music being broadcast), and One Touch EQ, an extremely powerful tone control circuit that takes the guesswork out of getting great sound quickly. Plus, each custom cabinet contains specially designed, full-range speakers positioned at critical angles to maximize projection and clarity without feedback.

Each system offers flexible input and output connections, tone control on each channel, system tone control, effects send and returns, digital reverb, recording outputs and inputs (for CD, tape, video, DVD, or computer connections), speaker and microphone cables, and Fender's P-51 microphones. All systems are compatible with the new Passport Wireless systems for the ultimate in flexibility and portability. The Passport's durable power supply delivers consistent power - in stereo - whether you are using the system with an AC or DC source, and the entire system is packaged into a unique, weather-resistant, portable case utilizing a patented latching system.

They All Feature:

- ◆ Mic/line inputs are balanced XLR, plus either balanced or unbalanced 1/4" TRS. (On the P-150 and PD-150 Deluxe, Input 3 also has stereo RCA connectors buffered to mono). Stereo AUX Return is 1/4" TRS.
- ◆ Digital reverb provided with EFX / AUX Send on each channel. EFX Return to main control provided with remote bypass
- ◆ Single switch configures for stereo (R/L) or (Main/Monitor) use. Master level controls provided for each power amplifier. (P-250 and PD-250 Deluxe systems only)
- ◆ Pan controls for Mic/Line channels; balanced controls for stereo input channels

- ◆ Overall system EQ (for room conditions) and individual channel EQ
- ◆ Tape out and reverb footswitch jacks
- ◆ Exclusive VIP (Vocal Input Priority) control provides automatic priority of channel 1. Perfect for voice over announcements, and a systems operator isn't required
- ◆ Docking connector for passport wireless receiver
- ◆ Innovative deluxe speaker array design for superior sound in any application
- ◆ Superb feedback rejection allows the speakers to be placed behind the user, eliminating the need for separate monitor speakers

- ♦ 1%" stand adapters included
- ◆ Switching power supply delivers rated performance even when encountering low power line voltages
- ◆ Switchable line voltage for international use
- ◆ Systems can run on 12v DC power with optional DC adapter
- ◆ Systems include one (P-150/PD-150 Dlx) or two (P-250/PD-250 Dlx) professional cardioid dynamic microphones, 18' microphone cable(s), two 20' speaker cables and a detachable power cable. For super convenience, they have a mic/cable storage compartment with latching lid



FENDER

PASSPORT SYSTEMS

PD-150

- ◆ 28 lbs.
- ◆ Four input mixer: Three mic/line, One mono/stereo
- ◆ Operates on AC or DC power
- ◆ 150 watts (75 per channel) stereo, with digital reverb
- ◆ One P-51 microphone (with mic clip, cable and carrying pouch)
- Proprietary DSA speaker design featuring three custom speaker drivers per cabinet



PD-250

- ♦ 55 lbs.
- ◆ Six input mixer: Four mic/line, Two mono/stereo
- ◆ Operates on AC or DC power
- ◆ 250 watts (125 per channel) stereo, with digital reverb
- Proprietary DSA speaker design featuring four custom speaker drivers per cabinet
- ◆ Two P-51 microphones (with mic clips, cables and individual carrying pouches)



ACCESSORIES

Wireless Executive System

Executive Kit

Same as above without the receiver159.95

Wireless Hand-Held Mic System

Includes a handheld electret-condenser cardioid mic and a custom docking receiver.........179.95

Wireless Mic

Same as above without the receiver149.95



P-51 Microphone Kit

12v DC-DC Power Converter

Passport Battery Pack

Travel Pack 250

A steel adjustable luggage cart and padded water-resistant canvas cover......**89.95**

250 Series Protective Cover

Padded, water-resistant canvas cover......42.50

150 Series Protective Cover

Same as above for the 150 series......**26.95**

ST-275 Stand Kit

Two heavy-duty tripod stands constructed of anodized aluminum alloy tubing with a nylon carrying bag.......119.95

ST-280 Stand Kit

The same as the ST275, with two additional mic tripod stands139.95

Speaker Wall Mount Kit

Custom fitted, universal position wall mounting bracket for a Passport speaker49.95

Dual Speaker Mount

Allows you to mount two speakers (P-150 or P-250) on a single speaker stand.......34.95

DC Power Accessory Bag

Holds the Passport Battery Pack, DC-DC converter, all cables and microphones......**59.95**

Passport P-10 and P-10W

A highly portable, personal sound system that is ideal for paging applications, tour guides, classroom and day-care activities, crowd communications and all situations where you need to raise the volume of your voice to communicate effectively with a crowd or small audience. The systems are battery powered and weigh only 6.5 lbs.

P-10W - Comes with a built-in wireless receiver and hand-held wireless cardioid, electret condenser mic, battery, recharger and shoulder strap299.95

P-10 - Comes with a dynamic microphone and a 3′ coiled cable, battery recharger and shoulder strap209.95





JBL

SOUNDFACTOR

The SoundFactor series offers musicians, DJs and other users of live sound reinforcement speakers the performance that goes with JBL speakers at prices they can afford. To achieve this, SoundFactor includes only those features that contribute to sound quality, reliability, and durability—without sacrificing JBL's legendary standards. For example, SoundFactor speakers must pass the same 100-hour, full rated-power torture test that JBL high-end touring systems must survive.

SoundFactor's crossover uses advanced network topology designs that are far more sophisticated than the simple crossovers typically seen in lower-prices systems. Heavy gauge wire is used for

inductors to assure that distortion due to coil saturation is minimized and SonicGuard high-frequency driver protection guards against damage caused by inadvertent overpowering of the system. All SoundFactor models are constructed of carpet-covered, 3/4" MDF. All-metal handles and an 18 gauge, full metal grille are also used. SoundFactor also uses JBL's Progressive Transition Waveguide design for well-controlled coverage, low-distortion, and good frequency response Tough construction, great performance, gentle on your budget - JBL SoundFactor.

FEATURES

Hardware

All the SoundFactor models use tough, non-resonant all-steel handles with big, beefy bars. And the entire baffle (not just the woofer) is protected by 18 gauge steel grills.

Enclosure Construction

For SoundFactor, JBL selected a rugged and acoustically superior 3/4" MDF enclosure material and put it all together with advanced adhesives and closely spaced mechanical fasteners. Not only are the cabinets rugged, but the denser enclosure walls are more rigid, delivering better low end as a result.

Crossover Network Design

While the drivers are the muscle of a speaker system, the crossover network is the heart and soul. SoundFactor uses the same kind of sophisticated advanced network that JBL applies to top-of-the-line systems. SoundFactor networks are built using heavy coils with massive cores and heavy gauge wire so they won't saturate when you drive them hard, and high-voltage capacitors that can handle what you send them. SoundFactor networks use an advanced design that shapes frequency response for coherent summation in the critical crossover region for better mid-range clarity and more consistent coverage at all frequencies.

SonicGuard

Feedback, dropped microphones, pushing the amps into clipping - all these things can quickly destroy even the best high-frequency drivers. That's why JBL SoundFactor speakers include SonicGuard protection. SonicGuard circuitry absorbs excess energy without interrupting the performance. No circuit breakers to reset, no fuses to replace, and no "poly-switches" to degrade sound quality.

Progressive Transition Waveguide

Another example of JBL's innovation is the PT Waveguide design. For decades, horn designers were faced with trade-offs between well-controlled coverage, low-distortion, and good frequency response. JBL developed proprietary algorithms which allow the design of waveguides that give the PT waveguides the best performance in all three areas.

The JBL 100 Hour Torture Test

SoundFactor designs have to survive the same 100 hour torture test as JBL's most expensive systems. When JBL specifies a speaker as having 250 watts continuous power capacity, that means samples of the speaker system have survived a grueling, 100 hour test with IEC noise at 250 watts continuous and 1000 watts peak power. No one in the industry uses a more demanding standard.

SoundFactor speakers have quite a family name to live up to. Just consider its closest relatives - SR-X, MPro, EON G2... legendary JBL performers in the world of professional loudspeakers; products that outperform anything else their respective classes have to offer. Now, that same commitment to performance, quality and technical excellence is also available with a new ingredient: affordability. By keeping everything that makes a speaker perform and sound its best and eliminating things that don't, SoundFactor empowers your performance through speakers designed and built by the worlds leading supplier of professional sound reinforcement products.



SOUNDFACTOR

SF12M

12" Two-way Stage Monitor Speaker System



The SF12M isn't just a PA speaker in a wedge-shaped box - it was designed from the ground up as a monitor. It is extremely compact, so it won't block audience sightlines or take up too much of the limited real-estate on stage. And it's voiced to let the performers hear the pitch, harmony, and rhythm cues they need for a tight sound. With its high sensitivity (99 dB SPL), it will crank out plenty of sound even

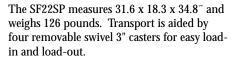
with a moderately powered amplifier. For compatibility it's equipped with Neutrik Speakon and 1/4" input connectors. Continuous power capacity is 250 watts and Peak power capacity is 1000 watts. A 35 mm pole mount socket lets it do double duty as a main PA speaker.

SF22SP

Dual 12" Powered Subwoofer

The SF22SP is a dual 12° , powered subwoofer using a fourth-order symmetrical band pass enclosure design. It has built-in 500 watt amplifier with 300-watts continuous power or 500-watts peak. For versatility and ease of use, you can plug either a line-level or speaker-level signal into the SF22SP. Its balanced, line-level stereo inputs combine both channels for use in systems with a single sub and two satellites. The speaker-level input is especially useful, as this allows connection of the sub via the loop-through connectors, which then pass on the amplified signal to the passive satellite speakers, such as the SF15.

Accepts stereo or mono line level inputs via balanced XLRs as well as single channel speaker level input via a 1/4″phone jack. Integral signal processing includes a stereo crossover and limiting for the internal amplifier. A pair of XLR outputs may be used to pass the input signals to another system or to send a highpassed, line-level signal to a pair of powered, full-range speakers. Satellite speakers can sit atop the 24″ pole that is included with the subwoofer.





Subwoofers are usually thought of as having large 15 $^{\circ}$ or 18 $^{\circ}$ woofers, but a pair of 12 $^{\circ}$ actually outperform a single 18 $^{\circ}$. That's because how low and loud a speaker can play is determined by how much air it can displace, which is determined by the area of the speaker's cone times the maximum distance the cone can travel. A pair of 12 $^{\circ}$ actually displaces more air than a single, comparable 18 $^{\circ}$ speaker.

Designed for dance music and live reinforcement of drums and bass, which can demand more than a basic two-way speaker can deliver, the SF22SP can work with either powered or non-powered speakers, external amps or a powered mixer. Add the SF22SP, and you've added strong low frequencies to your sound system.

SF15

15" Two-way Sound Reinforcement Speaker System

This SF15 is a trapezoidal 15″ front-of-house speaker that is the choice for live sound, dance music and speech reinforcement. It includes SonicGuard high-frequency protection, a 35 mm pole mount socket, and an impressive peak power capacity of 1000 watts (250 watts continuous power capacity) For compatibility it's equipped with Neutrik Speakon and 1/4″ input connectors.



SF25

Dual 15" Two-way Sound Reinforcement Speaker System



The SoundFactor SF25 is a dual 15", two-way speaker system designed for live music performance and playback. However, in reality it is more of a three-way system in that the lower woofer is actually rolled off at a lower frequency than the upper woofer. That makes it right at home in applications where additional low-frequency power and extension is needed but adding a subwoofer to the system is not practical. Continuous power capacity is 500 watts and

Peak power capacity is 2000 watts. For compatibility it's equipped with Neutrik Speakon and $1/4^{\prime\prime}$ input connectors.

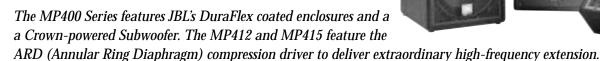
Quasi Three-Way Crossover Design
Dual 15" systems can crank lots of low-end with their
double woofers, but they represent a design challenge.
The high-frequency driver and both mid-frequency
drivers are all trying to produce mid-range. But since
the mid-range is coming from three different places
there's lots of uncontrolled "phase cancellation." The
result is what engineers call "comb-filtering" and what
listeners call "muddy mids". The SF25 crossover design
solves this problem by rolling off the mids from the
lower woofer so it's working more like a built-in subwoofer. With only the upper woofer and the high-frequency driver covering the mid-range, the SF25 delivers
"coherent summation" for clear mids.



MPro SERIES

The MPro Series speakers are designed for music pros looking for professional perform-

ance and appearance in live sound reinforcement speakers. The MPro line has two segments, the 200 Series with carpet-covered enclosures and the 400 Series with higher power handling, DuraFlex™ coated enclosures and a Crown-powered Subwoofer. The MPro 200 Series features premium-grade carpet covered 18mm plywood enclosures. The edges of the carpet are captured by the joint detail to prevent visible seams or peeling. The largemouth horn design of the MP212, MP215 and MP225 delivers smooth, natural reproduction—especially in the critical midrange. A 16-gauge, steel grille protects the woofers.





FEATURES

They All Feature

- ◆ 70° x 70° horn designed for even coverage and smooth response on and off axis
- ◆ Ferro-fluid cooled compression driver with titanium diaphragm
- ◆ SonicGuard[™] protects high-frequency driver from excess power without interrupting the performance
- ◆ Low frequency drivers with 2-1/2" (64 mm) edgewound voice coil
- ◆ Rectangular (MP212/225) and trapezoidal (MP215) enclosures constructed of 18 mm plywood using tongue-and-groove joint detail for durability and years of service.
- ◆ Molded baffle is constructed of SMC (sheet molding compound), a durable, crosslinked thermo-plastic also used in automotive body panels

- **◆** Laminar Flow Baffle™ reduces distortion and diffraction effects by providing smooth, rounded baffle contours
- Precision engineered crossover for optimal power response and performance in the critical mid-range region.
- ◆ Covered in dark gray, premium grade, 12 oz. carpet - the most durable and attractive carpet covering available
- ◆ An attractive 16 gauge, hexagon perforated, steel grill protects speaker components from damage.
- ◆ Input panel includes a Neutrik Speakon NL-4 input and a 1/4" phone jack for flexible connectivity.
- ◆ 35 mm pole mount receptacle (all except the MP225)

The MPro line offers a unique, professional appearance, superb acoustical performance and cutting-edge configurations. MPro includes the first mid-priced subwoofers to offer VGC (Vented Gap Cooling) technology and the first speaker systems offering JBL's Laminar Flow Baffle technology. The JBL Laminar Flow Baffle incorporates smooth, contoured surfaces that greatly reduce distortion caused by turbulence and diffraction. Constructed of Sheet Molding Compound (a super tough, cross-linked, polymer also used for automotive body panels), this one-piece baffle integrates horn, ports and woofer-mounting into a single part. This permits features to be tightly spaced, allowing a large horn-mouth (for improved mid-range and directivity performance) without making the cabinet too large.

MP212 12" Two-Way Speaker

Compact, portable, 12" two-way speaker in a multi-angle enclosure that's equally at home as a FOH (front-of-house) speaker or as a stage monitor. Designed for portable applications in live performance, music playback and speech reinforcement, the MP212 delivers excellent performance by itself or as a satellite over the MP255S subwoofer.

MP215 15" Two-Way Speaker

The MP215 is a portable, 15", two-way speaker designed for live performance, music playback, and speech reinforcement.

MP225 Dual 15" Two-Way Speaker

The MP225 is a portable, dual 15", two-way speaker system designed for live performance, music playback, and speech reinforcement. The crossover network employs separate low-pass filters for each woofer. The lower woofer is rolled off at a lower frequency than is the upper woofer. This reduces mid-range phase anomalies while retaining the strong low-frequency output that is the primary appeal of a dual woofer system.











MPro 200 / 400 SERIES

MP255S Dual 15"Subwoofer



The MPro MP255S is a dual 15" subwoofer designed to supplement and extend the low-frequency output of full-range systems in a variety of portable and fixed applications.

Bandpass design (uses two tuned chambers to shift its energy down into the low-frequency region) combined with an internal Low Pass Filter (to get rid of the remaining mid-range output) assures solid performance in bi-amplified or single amplified systems. While configured for vertical orientation, the speaker may also be used in a horizontal position when a larger footprint and lower vertical height are preferred.

- ◆ Dual 15" band-pass design puts the energy in the bass region where it's needed for "punch" and power.
- ◆ Low-pass filter blocks mid-range output from the subwoofer. Combined with the band-pass design, this assures that the MP255S will combine with the mid / high speaker for excellent low-frequency performance - even without a separate subwoofer amplifier. Even greater performance and control is possible in bi-amplified configurations.
- ◆ Dual Neutrik Speakon NL-4 input connectors provided for secure connection and loop-through capability.
- ◆ Input connections may be reconfigured for pin 1± or pin 2± for compatibility with any cabling scheme.
- ◆ Heavy duty casters mounted on the rear of the enclosure for easy transport.
- ◆ 35 mm pole mount receptacle. 24" steel pole included

MP410 Series

The MPro 400 Series steps up
with enclosures coated with
JBL's exclusive DuraFlex - a
rugged, advanced, poly-urea
finish. They also feature dual
Neutrik Speakon NL-4 input
connectors. Designed for
portable applications in live
performance, music playback,
and reinforcement of speech,
the MP410, MP412 and
MP415 deliver excellent performance by themselves or as
satellites over the MP418S
and MP418SP subwoofers.

MP410 10" Two-Way Speaker

MPro 400 family

The MP410 is a compact, portable, $10^{\circ\prime}$, two-way speaker system using JBL components in a professional quality enclosure that looks and sounds like the high-end, specialty speaker systems that top audio pros rely on. It incorporates a $10^{\circ\prime}$, woofer with $2^{\circ\prime}$, edgewound voice-coil. Surround design is optimized for maximum excursion and low distortion using FEA (finite element analysis) modeling. The compression driver with pure titanium diaphragm and ferro-fluid cooling provides improved smoothness and thermal power handling.

MP412/MP415 12" and 15" Two-Way Speakers

The MP412 and MP415 are portable 12″ and 15″ two-way speaker systems in a multi-angle enclosure that supports main PA or stage monitor applications. Their high-frequency performance makes them outstanding choices for high-level music playback, especially when combined with subwoofers.

- ◆ JBL 2023 12" and 2033 15" woofer with 3", edge-wound voice-coil. SHG (Selective Harmonic Geometry) technology reduces harmonic distortion and improves power response
- ♦ With a design that combines very high motor strength with low moving mass, their unique, ARD (Annular Ring Diaphragm) compression driver delivers smooth, extended high-frequency output to 20 kHz
- ◆ High power handling 350 watts (average) and 1,400 watts (peak) power capacity



JBL

MPro 400 SERIES

The MPro MP418S is a compact, single 18" subwoofer in a bass reflex enclosure. It is designed to supplement and extend the low-frequency output of full-range systems in a variety of portable and fixed applications. Achieving the power and performance characteristics of the MP418S requires the use of a woofer with very high motor strength - the JBL 2241. This woofer uses VGC (Vented Gap Cooling) an exclusive JBL technology that greatly reduces the loss of output resulting from power compression.

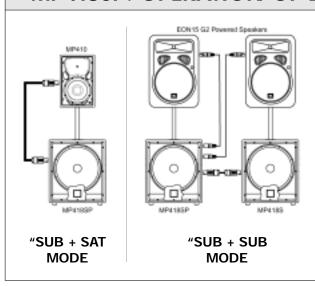


"Subwoofer / satellite" systems (systems in which a smaller, two-way speaker is mounted over a subwoofer) have grown in popularity as users recognize the benefits of elevating the mid and high frequencies while positioning the subwoofer on the floor or stage. To support such applications, the MP418S includes a specially designed, top-mounted, 35 mm pole mount receptacle. The input panel incorporates a pair of Neutrik Speakon NL-4 connectors wired in parallel. The subwoofer is supplied with pins 1± connected to the woofer. This may be easily reconfigured to work with cabling systems intended to drive subwoofers on pins 2±. The MP418S is also designed to be used as a "slave" to the powered MP418SP. When used in this manner, the result is a dual 18", powered

subwoofer system with 1,320 watts total power.

The MP418SP is a compact, powered, single 18, bass-reflex subwoofer system. Designed for portable applications, the MP418SP includes heavy-duty, 3" casters and ergonomically positioned steel carry handles to facilitate transport. The MP418SP uses the same driver and enclosure tuning as the non-powered MP418S. It is designed for portable applications and includes a heavy-duty, 3" casters and ergonomically positioned steel carrying handles for transport.

MP418SP: OPERATION OF DUAL-CHANNEL CROWN AMPLIFIER



A dual-channel Crown amplifier with signal processing is incorporated into the system. While one amplifier channel (the "Internal" channel) is dedicated to powering the internal 18" VGC woofer, the other channel (the "External" channel) may be used in one of two ways:

In the "Sub + Sat" mode, an MP418SP may be used with a full-range, passive speaker for a single channel, two piece system. The external amplifier channel powers the satellite.

In the "Sub + Sub" mode, the external amplifier channel is used to drive the MP418S (a passive version of the MP418SP). Stereo, high-passed line-outputs are provided to drive powered satellite speakers or an external amplifier / speaker system.

The MP418SP is a compact, powered, single 18", bass-reflex subwoofer system with the perfect formula for great sound—just power the best speakers with the best amplifiers. The dual channel internal amplifier is rated at 660 watts @ 4 ohms; 400 watts @ 8 ohms with less than 0.5% THD. One channel is dedicated to the internal 18" woofer. The other can drive your choice of an MP418S passive subwoofer or MPro two-way satellites.



EON 15P-1/EON 1500

	MPRO SERIES SPECIFICATIONS								
	MP410	MP412	MP415	MP418S	MP418SP				
System Time	10" two-way bass-reflex	10" two-way bass-reflex	15″ two-way bass-reflex	18" two-way bass-reflex	Powered 10" two-way bass-reflex				
Frequency Range	50Hz - 20kHz (-10dB)	50Hz - 20kHz (-10dB)	44Hz - 20 kHz (-10dB)	36Hz - 300kHz (-10dB)	36Hz - 150kHz (-10dB)				
Frequency Response	62Hz - 14kHz (±3dB)	67Hz - 20kHz (±3dB)	57Hz - 20kHz (±3dB)	40Hz - 300kHz (±3dB)	40Hz - 120kHz (±3dB)				
Sensitivity (1w, 1m)	94 dB SPL	99 dB SPL	99 dB SPL	101 dB SPL					
Nominal Impedance	8Ω	8Ω	8Ω	4Ω	4Ω				
Maximum SPL @1m	125 dB	130 dB	130 dB	135 dB peak	132 dB SPL (peak@1m)				
Power Capacity	300w	350w	350w	600w					
Peak Power Capacity	1200w	1400w	1400w	2400w					
Nominal Dispersion	70° x 70°	70° x 70°	70° x 70°						
Transducers: LF	1x JBL 127H-4	1x JBL 2023H	1x JBL 2033H	1x JBL 2241G	1x JBL 2241G				
HF	1x JBL 2412H	1x JBL 2406H	1x JBL 2406H						
Enclosure	18mm plywood	18mm plywood	18mm plywood	18mm plywood	18mm plywood				
Input Connectors	2x Neutrik Speakon NL-4, parallel	2x Neutrik Speakon NL-4, parallel	2x Neutrik Speakon NL-4, parallel	2x Neutrik Speakon NL-4	2x Neutrik Speakon NL-4, parallel				
Net Weight	34 lb.	47 lb.	59 lb.	64 lbs.	119 lbs.				
Dimensions (HxWxD)	20 x 13.3 x 11.8"	23.9 x 15.6 x 13.6"	28.3 x 18.2 x 15.1"	24.3 x 21.2 x 23.6"	24.3 x 21.2 x 30.6"				

THE ORIGINAL EON SERIES

The EON system is a made-to-match system. All components are designed to give you hassle-free professional-sound quality and performance. EON was the first professional sound system made to be truly portable. The secret behind EON's feather-weight is a rare earth material called neodymium with 10 times the magnetic strength of ceramic magnets, enabling a few ounces of neodymium to replace nearly 20 lbs. of conventional magnetic materials.

For flexibility, the EON speakers are built to work as both upright speakers and wedge monitors. With ergonomic handles and light weight, they are remarkably easy to carry. Simple to set up. And a pleasure to use.

EON 15P-1

The EON 15P-1 is a two-way powered speaker system which incorporates a discrete 130 watt power amplifier for low frequencies and a 50 watt power amplifier for the high-frequency driver in a light weight rugged enclosure. Designed for multi-purpose usage, the EON-15P-1 may be driven from a mixer or a single microphone.

EON 1500

The EON 1500 features the same light weight, portability and great sound of other EON speakers, but is designed for use with a powered mixer or external amplifier. EON 1500 features proven JBL components like a liquid-cooled compression driver and SonicGuard protection. It's unique design allows you to use them as a main speaker, tripod mounted or a dual-angle floor monitor. The EON 1500 accepts a 1/4" phone jack or Speak-On input connection wired in parallel for ease of hookups.





JBL

EON G2

Hassle-free with professional sound quality and performance JBL's EON G2 series is designed for applications ranging from live sound reinforcement, speech and vocals to music playback in entertainment, A/V and institutional environments.

Consisting of the compact EON10 G2 (10" woofer) and full-range EON15 G2 (15" woofer) powered speakers with three input mini-mixer, and the EONSUB G2 powered subwoofer, they are not only ideal for musicians, but for hotels, meeting planners, AV companies and just about any application where portable compact sound reinforcement is required.

They deliver 125 and 300 watts of power (respectively) to a Neodymium Differential Drive low frequency driver. The driver boasts a dual neodymium magnet and dual voice coil motor that delivers high output and low distortion from a lightweight woofer. Meanwhile, the high frequency amplifier delivers 50- and 100 watts of power to a titanium diaphragm compression driver with ferro-fluid cooling. JBL's revolutionary "ThermoMaster Total"



Thermal Management System" eliminates the need for any internal or external cooling fans. Instead, a single piece, cast-aluminum baffle integrates the woofer frame, horn and amplifier heat-sink while air movement through the finned ports dissipates heat. With their integrated three-input mixer, the speakers can directly accommodate electronic keyboards, drum machines, electrified acoustic guitars, and microphones. An additional XLR output allows the speakers to be daisy-chained together or send the mixed output to an external mixing console.

With 125 watts for low frequencies and 50 watts for the highs, the EON10 G2 can be used in AV applications, smaller musical and spoken word performances. Versatile cabinet design allows use in several ways: As a front of house speaker, sitting on a flat horizontal surface or raised in the air using standard tripod speaker stands. Angled back allows use as a vocal or instrument monitor on stage. The EON10 G2 can also be snugly placed atop the EONSUB G2 powered subwoofer for added volume and extended bandwidth. Combined, they provide a full range sound system for small and medium sized events. With 400 watts of power, excellent sound

quality, easy to transport and set up, the EON15 G2 is at home as a main PA or on stage as a monitor or instrument amplification system. Use by itself for casual solo or duo work, or combine multiple EONs into a complete, powerful PA system. Electric guitarists using amp modeling modules will find that the clean, full-range sound of EON15 G2 reproduces all of the subtle tones the modules can produce.

EON10 G2

- ◆ Multi-angle enclosure for FOH or stage monitor applications
- ♦ 60° x 90° constant directivity horn
- ◆ 10" Differential Drive low frequency driver with neodymium magnet for light weight and reduced distortion
- ◆ 1" JBL compression driver with titanium diaphragm and ferro-fluid cooling
- ◆ 125 watt low-frequency and 50 watt highfrequency (bi-amplified) amplifiers actual power delivered to the drivers

- ◆ Selectable balanced mic/line input and one dual-channel, 1/4" TRS line-level input
- ◆ Balanced loop/mix output. "Daisy-chain" additional EON speakers or send the mixed output to a mixing console
- ◆ Rugged, lightweight, black co-polymer enclosure
- ◆ Integral 35 mm pole mount receptacle with securing thumb screw
- ◆ Attachment points for fixed-angle and adjustable mounting brackets

EON15 G2 Step-up Features

- ◆ 15" Differential Drive low-frequency driver with dual neodymium magnet for light weight and reduced distortion
- ◆ 1" (throat diameter) JBL compression driver with 1.75" titanium diaphragm and ferro-fluid cooling
- ◆ 300 watts low-frequency and 100 watts high-frequency (bi-amplified) - actual power delivered to the drivers
- ◆ One balanced mic/line input, two 1/4" phone line-level inputs
- ◆ Two-band equalization
- ◆ Extended low-frequency performance delivers powerful bass down to 39 Hz
- ◆ Tailored dynamic processing protects amplifiers and speakers from being overdriven without producing extreme changes in frequency response as level varies



EON G2

EONSUB G2

The EONSUB G2 offers powerful low frequencies in a compact, durable enclosure, making it a perfect companion for either the EON10 G2 or EON15 G2 powered speaker, or any sound system that needs additional low end.

When you combine the EONSUB G2 with either the EON10 G2 or EON15 G2, you have a full range sound system whose clarity, volume and low end are truly amazing, considering their small size. Because the power amp and crossover are internal to all EON speakers, set up time and outboard equipment are minimized. Just plug in and play.

- ◆ 250 watts of low-end power and a frequency range of 40 to 200 Hz
- ◆ Patented Neodymium Differential Drive woofer generates maximum efficiency with minimum weight
- ◆ Thermomaster cooling system allows the amplifier and 15" woofer to stay cool, even under the most challenging circumstances, without the need for noisy fans or protruding external heatsinks
- Specifically designed to securely hold the EON10 G2 using receptacles built into the top of the EONSUB G2
- ◆ Scratch-forgiving black covering and embossed grill cover for added rigidity

EON G2 Accessories:

ESK15: Suspension kit for EON15 29.95
ESK10: Suspension kit for EON10 22.95
EONBRK1: Mounting bracket (fixed angle) for EON 15" models39.95
EONBRK2: Mounting bracket (fixed angle) for EON 10″ models33.95
SS2-BK: Black anodized aluminum tripod speaker stand134.50
EON10 Bag: Zippered, plush-lined Cordura bag for EON 10 G2 39.95
EON15 Bag: Zippered, plush-lined Cordura bag for EON 15 G2 49.50
EON15WB: Zippered, plush-lined Cordura bag with wheels for EON 15 G2 99.95

EON G2 Systems

JBL offers the EON10 and EON15 G2 in complete full-function sound systems that include two speakers, a mixer, two JBL dynamic M50S microphones and four 25´XLR cables for connecting the mixer to the microphones and speakers.

Ideal for smaller musical performances, speeches, coffeehouses, schools, churches or any application that requires quality sound in a smaller venue, the 14 input, 350 watt EON10 G2 sound system includes the MusicMix 14 mixer and a pair of EON10 G2 speakers. When combined with the EONSUB G2 subwoofer, the power of the system is more than doubled. Featuring twice the power and greatly enhanced sound, the 16 input, 800 watt EON15G2 System sound system includes the MusicMix 16 mixer and two EON15 G2 speakers.

EON10 G2 System

2x EON10 G2 EON MusicMix 14 2x M50S Microphones 4x 25' XLR Cables EON15 G2 System

2x EON15 G2
EON MusicMix 16
2x M50S Microphones
4x 25' XLR Cables



The EON MusicMix 14 and 16 are featurepacked mixers with six or eight mono inputs, two stereo inputs, two auxiliary inputs, and three band equalizer. Their third auxiliary channel can be selected as either pre- or post-fader, for greater control and flexibility with monitors and effects devices.

- Six or eight mic/line input channels
- Two stereo input channels
- Two auxiliary input channels
- 3-Band channel EQ with variable midfrequency for precise tailoring of the sound
- Individual channel on/off switches let you mute an input without disturbing your mix
- Low-cut filter to reduce unwanted noise
- 48v Phantom Power
- Three Auxiliary Mix Busses: 1 Monitor, 1 Effects and 1 Selectable
- Complete 'listen' (PFL/AFL) system for setup and trouble shooting
- Smooth 100mm faders faders

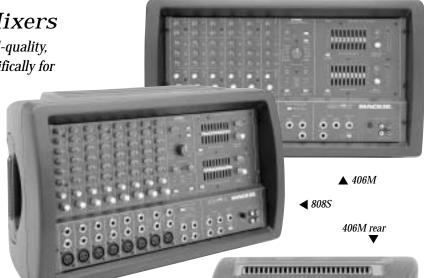


PPM SERIES

Professional Powered Mixers

Mackie's PPM Series consists of three professional-quality, high-performance powered mixers designed specifically for

applications such as local and regional club bands, rehearsal rooms and general gigs, small-to-medium club PA systems, small-to-medium houses of worship, and corporate A/V. From the 6-input, 500-watt mono 406M to the the-top-of-line 8-input, 1200-watt stereo 808S, you can count on ultra-low noise, high headroom, graphic EQ, sixteen 32-bit digital effects, rugged composite -molded cases, and a real RF Series high-current amplifier inside.



FEATURES

- ◆ In addition to 16 ultra-realistic EMAC 32-bit processing effects, there are two parameter controls that expand the range of each effect for almost unlimited sound possibilities. There is also a special EFX WIDE circuit that can psychoacoustically enhance the width and depth of reverb, chorus, and flange— perfect for set-ups where your speakers have to be placed close together.
- Studio-grade 9-band mains and monitor graphic EQs utilize multiple summing amps and precision infinite feedback band-pass filters to yield exceptionally low-noise low-distortion sound.
- ◆ 75Hz low-cut filters in both EQ sections remove microphone thumps, P-pops and stage rumble. Sharp 18dB/octave circuitry works without cutting audible bass.



- ◆ Mic/line mixer section based on the MicroSeries 1202-VLZ and enhanced with new mic preamps and many ingenious extra features.
- Level-setting control and LED on every mixer channel makes setting input levels a snap. This is the key to optimizing headroom and reducing mixer noise.
- ◆ Break switch mutes Channels 1-6 during set breaks so you can play music (via the tape input and stereo channels 7 or 8) without having to mess up your levels, deal with feedback loops, or worrying about somebody grabbing the microphone while you are on a break.
- Built-in soft-knee compressor works wonders on vocals and percussion, letting you get more out of your speakers.
- EFX to Monitor lets you add effects to onstage monitor mixes independently of the main mix.
- ◆ Dual line inputs on channels 7 and 8 (mono models), and stereo line inputs (stereo models) lets you hook up keyboards or CD players without burning up two channels. (Not on the 406M).
- ◆ Dozens of conveniences including separate input level control, external effects loop, effects foot switch jack, and a gently tilted front panel that makes it easy to make adjustments.

Power Amp Section

- Power amp routing switch lets you assign power amps to mains or mains + monitors
- Massive 10,000 microfarad storage capacitors to satisfy current-sucking peak power demands.
- Massive toroid transformer for high current output
- ◆ Massive, full-width 1-piece die-cast heat sink is custom-cast for maximum heat dissipation—keeps output devices running cool even when you're playing hot. Black paint coating improves efficiency by additional 15%.

Rugged Construction

- Rugged injection-molded chassis resists impacts that would destroy most other powered mixers. Built-in handle allows easy transport.
- For durability and reliability, they use milspec fiberglass circuit boards (instead of cheap phenolic) to resist physical impact. Rugged, sealed rotary controls resist dust, moisture and other contamination.



PPM SERIES

MASTER SECTION Effects Drive level control & clip OL LED 2 Effects Bypass with LED 3 Effects Wide spatial expander EMAC effects preset select-o-matic 4 5 Time/Rate & Damping/Depth parameter controls Monitor graphic EQ with centers ±15dB at 63Hz, 125Hz, 6 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz, & 16kHz Monitor 75Hz, 18dB/oct low cut filter 7 8 Effects to Monitor level control 9 Master Monitor output level control Monitor output level LED ladder Main graphic EQ (same centers as #6 above. 11 EQ is stereo on 808S and 408S) Main 75Hz 18dB/oct low cut filter 12 Effects to Main level control 13 Main output level control 14 Main output LED ladder 15 Power amp routing switch 16 17 External effects foot switch jack External effects loop - mono send 18 (stereo return on stereo models) 19 Power amp line in jacks 20 Monitor line output

Line level mixer output(s) (bal/unbal)

RCA Tape inputs and outputs (unbal) Phantom Power switch with LED

Break Switch with LED (chs. 1-6 only)

Soft-knee compressor switch

Tape input level control

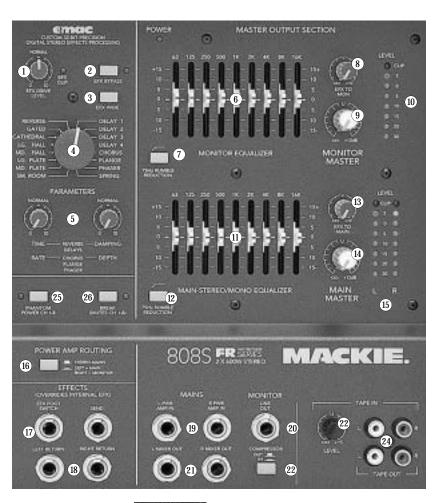
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PPM SERIES SPECIFICATIONS								
	808S	808M	406M					
Total Channels	8	8	6					
Total Inputs	18	18	12					
Configuration	stereo	mono	mono					
Mic Preamps	8	8	6					
Mono line inputs	6	6	6					
Dual Line Inputs	_	2	_					
Stereo Line Inputs*	2	_	_					
2-ohm Power	600+600w	600+600w	250+250w					
4-ohm Power	450+450w	450+450w	200+200w					
6-ohm Power	300+300w	300+300w	125+125w					
Channel EQ	3-band	3-band	3-band					
Main Graphic EQ (main)	true stereo 9-band +75Hz low cut	mono 9-band +75Hz low cut	mono 9-band +75Hz low cut					
Monitor Graphic EQ (monitor)	mono 9-band +75Hz low cut	mono 9-band +75Hz low cut	mono 9-band +75Hz low cut					
Channel Inserts	6	6	6					

* same jack set as above, use	ed fr Hi-Z mic inputs
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	CHANNEL STRIP
27	Monitor send for stage monitor feeds
28	EFX send to internal EMAC effects
29	12kHz HI shelving EQ. ±15dB
30	2.5kHz MID peaking EQ. ±12dB
31	80Hz LO shelving EQ. ±15dB
32	Pan control (stereo models only)
33	Input Level Control & Level Set LED
34	Master channel level control
35	Channel insert (mono channels only)
36	Line input also handles Hi-Z mics (bal/unbal)
37	Dual (mono unit) or stereo (stereo unit) line inputs on chs. 7 & 8 (not available on 406M)
38	The best mic preamps on any powered mixer



C300/300i



Passive 12" 2-Way Speakers

The C300 (Speakon connectors) and the C300i (1/4" connectors) uses the same basic transducers as the active SRM450 — with two differences. The C300's 1.75" high frequency compression

driver uses a composite mylar diaphragm; the 12" low frequency transducer incorporates a 3" inside/outside temperature- resistant voice coil. Both of these compensate for the fact that the speaker system must be able to handle a wide range of external power inputs (including Mackie's mega-powered PPM808S or PPM808M). The C300/C300i uses the same studio-quality horn assembly as the SRM450, with multi-cell aperture horn throat and large format exponential/conical high-frequency horn mouth for superb dispersion. This means everyone in your audience hears clearly... not just the people in the middle between the speakers. They have an asymmetrical trapezoidal cabinet for minimum internal resonance and the ability to recline for floor monitor use. Their enclosure is weight-balanced with dual side handles and top handle, built-in pole mount and ten built-in hanging points. Passive speakers (no internal amplification) the C300/C300i have a

Low-Impedance Compensated Crossover (LICC) with full built-in transducer protection that just beg to be energized to shock volumes with a powered mixer or amp.

- ◆ Wide-dispersion, studio-quality horn assembly with multi-cell aperture horn throat & exponential / conical HF mouth
- ◆ 1.75" high frequency compression driver
- ◆ Composite mylar diaphragm increases clarity, eliminates resonances
- ◆ 12" long-throw low frequency transducer
- ◆ Reclines for use as a stage monitor
- ♦ Weight-balanced asymmetrical trapezoidal cabinet - strongest & stiffest in it's class
- ◆ 10 built-in fly points & built-in pole mount
- ◆ Two comfortable side handles for easy carry
 & set-up + top handle for easy positioning
- ◆ 300 watts RMS power handling
- ♦ 8-Ohm nominal impedance
- ◆ Choice of Speakon or 1/4" jack connectors

\$500 Passive 15" 2-Way Speakers

Although not the cheapest 15" 2-way system on the market, the S500 is one of the most accurate and easy on the ears at high output levels. Make beautiful music with a Mackie powered mixer—especially when used with a high-wattage model, it really starts shaking your audience up. Tight bass, smooth midrange, spine-tingling treble... at shock volumes up to 127dB.

Low-distortion, high-output horn coupled to a 1.75" titanium diaphragm compression driver provides the correct power response and phase alignment to deliver a wide 75° x 65° dispersion pattern that lets everybody in your audience hear the same great sound. The S500 employs a trapezoidal enclosure that's both strong and resonance damping. It is built of rugged 16-ply Baltic Birch with tough end caps made of pressure-injected structural resin. The perforated steel grille is coated with a special scuff and weather-resistant polymer coating. Cast aluminum side handles are placed at the speaker's center of gravity for easy carrying and set-up. Rear panel inputs include both 1/4" and Neutric Speakon connectors wired in parallel.

- ◆ 1.75″ high frequency compression driver
- ◆ Composite mylar diaphragm increases clarity, eliminates resonances











SRM450

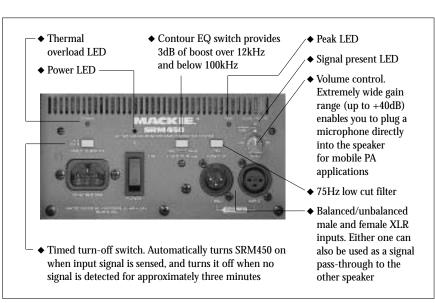
Active Sound Reinforcement Monitor



Forget about what other small PA speakers sound like. Especially forget what so-called "powered" speakers sound like. The active SRM450 is that different. The most sophisticated, versatile portable sound reinforcement speaker ever developed, the SRM450 translates the fidelity and performance found in Mackie's award-winning HR824 Active Near Field Studio Monitor into a tough, portable and easy to use composite enclosure. The SRM450 delivers tight, steel-fisted bass to below 55Hz and detailed, articulate treble out to 20kHz. Midrange is warm, natural, and free from ear-fatiguing harshness. Active technology with wide dispersion, studio quality horns lets the whole audience hear clearly, whether they're in the front, back, or way out on the sides of the room. And above all, the SRM450 cranks! Without a hint of distortion, it effortlessly achieves sound pressure levels that would melt conventional speakers into a pile of molten slag.

FEATURES

- ◆ Combination mic/line level control incorporating Mackie studio-quality low noise mic pre-amp. Built directly into the SRM450, this allows it to also function as a complete stand-alone PA system.
- ◆ 2-way bi-amplified active system —built-in monolithic 300 watt bass & 100 watt mid/high amplifier—no external power amplifier needed
- ◆ Servo-controlled RCF Precision 12″ (300mm) long-throw frequency transducer with inside/outside voice coil
- ◆ Studio-quality maximum dispersion horn design
- ◆ High (127dB) SPL output/low distortion
- ◆ 1.75″ high-output precision compression driver with damped titanium diaphragm assembly
- ◆ Level control, contour & low cut switches
- Built-in electronic equalization, phase alignment, time compensation, precision 24dB/oct.
 Linkwitz-Riley electronic crossover and protection circuitry.
- ◆ Power On, Thermal, Peak and Signal Present LEDs
- ◆ Molded composite, monocoque asymmetrical enclosure and metal grille
- ◆ Three balanced ergonomic handles make it easy to carry
- ◆ Timed Auto-on/Auto-off feature
- ◆ Pole-mountable and multiple fly points make it easy to set up—also a great floor monitor



Big studio monitors use an exponential horn design that keeps the air impedance constant and the sound smooth as silk. However, off-axis pattern control isn't great. Lots of speakers claim 90° horizontal dispersion. But when you examine their polar patterns, you discover that they don't achieve 90° dispersion at all frequencies. When a speaker has uneven dispersion (poor pattern control) at higher frequencies, acoustic energy projects straight out in a beam—great for the listeners right in front of the speaker, but muddy, dull, uneven sound off-axis.

The SRM450's horn design is a unique three-piece assembly derived from high-end studio monitor technology where wide dispersion and precise reproduction of voice and high frequencies is critical. Mackie applied this technology in a high powered, sound reinforcement application coupled with high output compression drivers. The result is an extremely smooth off axis response, which allows everyone in front of the SRM450 to experience the same high-resolution audio no matter where they are seated.



SA1232/SA1521/SR1530

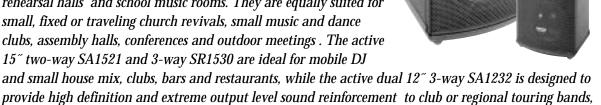
Active 2- and 3-Way Sound Reinforcement Speakers

Mackie's active sound reinforcement speakers are designed for extreme accuracy, high output, and smooth dispersion across the entire audio frequency range. They integrate

club PA systems, or medium to large size churches.



FR series amplifier power, active control electronics, and RCF Precision components to provide unparalled high resolution and clarity in the critical low-mid and mid-range frequencies Offering exceptional price/performance ratio, they are used in garage bands, one-man/duos/trios, local club bands, practice room rehearsal halls and school music rooms. They are equally suited for small, fixed or traveling church revivals, small music and dance clubs, assembly halls, conferences and outdoor meetings. The active 15" two-way SA1521 and 3-way SR1530 are ideal for mobile DJ



- ◆ They have a signal input panel containing XLR connectors for line-level input and loop-through connections, a level control, and four status LEDs for Power On, Signal Present, Limit, and Thermal functions. (The SR1530 doesn't have level control or Signal and Thermal LEDs)
- ◆ Their internal processors provide complete system management of all electronic and acoustic functions. These include an electronic active crossover, electronic phase alignment, electronic time correction, electronic equalization, and complete amplifier and component protection.
- ◆ To ensure long term reliability, their amps are mounted on a massive extruded heatsink, which is convection cooled and dramatically extends the life expectancy of the heat-producing components.
- ◆ Their trapezoidal cabinet is designed to withstand Neanderthal-levels of road and rental company abuse. The top and bottom of the enclosure are molded using a high-impact resistant composite resin. The front, back and sides are constructed of heavy duty, 13-ply Baltic Birch used in expensive Hi-Fi speaker systems.
- ◆ Weight-balanced for stable stand-mounting, they also feature two large-grip, castaluminum side handles while top and bottom handles allow optimal portability, setup and repositioning. Full-size, oval punched, weather-resistant steel grille pro-

SA1521 (Active 15" 2-Way)

A 'high output big brother' to the SRM450, the 500 watt SA1521 provides the same accuracy but with even more bottom end and a higher SPL. A two-way, bi-amplified, horn loaded, active speaker system, the SA1521 includes a high efficiency, light mass, 15" low frequency transducer with 2.5-inch inside/outside high temperature coil technology. This innovative woofer is combined with a state of the art, 1.75" titanium dome, 1" exit compression driver. This unique combination allows the system to be crossed over at 1300 Hz enabling the woofer to more efficiently keep up with the horn/driver combination. The result is that the SA1521 offers much better mid-band performance than other popular 15 +1 designs.

The fully integrated amplifier module contains two separate amps - one for each driver, which together generate 500 watts continuous RMS of total power and a maximum SPL of 130 dB. The low frequency amplifier uses Mackie's switch mode and Class G hybrid topology to deliver 400 watts of continuous output, and over 650 watts peak at 90% efficiency. The result is very little power being dissipated thermally through the heat sink.

SA1530 (Active 15" 3-Way)

The SR1530 is a three-way, tri-amplified, horn loaded, active system designed for high definition and extreme output levels. Precision components include a 15" woofer with inside/outside high temperature coil technology, a high-output, horn loaded 6" midrange speaker, and a one-inch exit compression driver mounted on a wide dispersion, extreme output high/mid horn design. The SR1530 is powered by an integrated three-channel amp module that generates 500 watts of total power.

SA1232 (Active Dual 12" 3-Way)

The SA1232 is also a three-way, tri-amplified, horn loaded system that includes two 12" woofers with 3" inside/outside high temperature coil technology, a high-output horn loaded 6" midrange speaker and a 1" exit compression driver mounted on a wide dispersion, 90° x 40° mid/high frequency Optimized Wavefront horn design. This unique horn design combines the mid and high frequencies to eliminate unwanted phase shifting. The SA1232 is powered by an integrated amp module that contains three separate amplifiers—one for each driver, which together generate a staggering 1300 watts RMS of total power and a maximum peak SPL of 133 dB.



SWA-1501/SWA-1801

15- and 18" High Output, Active Subwoofer Systems

Ideally suited for small to medium sized touring groups and mobile DJs as well as fixed installations in churches, corporate facilities, and nightclubs, the SWA1501 and SWA1801 feature high-quality 15- and 18" RCF Precision transducers with high-temperature inside/outside coil combined with a 500-watt continuous/700 watt peak (SWA-1501) or 900-watt continuous/1400-watt peak (SWA-1801) application-specific amplifier. Their cabinets are constructed with 18mm thick, 13-ply Baltic-Birch plywood finished in back splatter paint and equipped with cast aluminum side handles for efficient loading and transport as well as a female pole mount fixture. Together, these robust components allow them to deliver an impressive 128dB (SWA1501) or 135dB (SWA-1801) of peak output.



Input output options allow them to be easily configured for most any application. Stereo and mono inputs are provided through XLR style connectors while a high-pass output allows for connection to active full-range speakers or amplifiers powering passive full range speakers. Four function LEDs provide power on, limit, signal present, and thermal condition indication. A rotary level control allows adjustment from -15dB to +5dB.

	MACKIE SPEAKER SPECIFICATIONS							
	C300	S500	SRM450	SA1521	SR1530	SA1232		
Frequency Response (-10dB)	_	_	45Hz - 20kHz	49Hz - 20kHz	40Hz - 20kHz	38Hz - 20kHz		
Frequency Response (±3dB)	70Hz - 16kHz	50Hz - 20kHz	55Hz - 18kHz	57Hz - 18kHz	45Hz - 18kHz	45Hz - 18kHz		
Peak SPL (@1w/1m)	124dB	127dB	127dB	133dB	126dB	136dB		
HF Transducer Diameter	1.75″	1.75″	1.75″	1.75″	1"	1.75″		
HF Transducer Freq. Response	1kHz-20kHz	1kHz-20kHz	1kHz-20kHz	1kHz-20kHz	2.5kHz-19kHz	1kHz-20kHz		
MF Transducer Diameter	_	_	_	_	6″	6″		
MF Transducer Freq. Response	_	_	_	_	700Hz-3kHz	700Hz-3kHz		
LF Transducer Diameter	12"	15″	12"	15″	15″	2x 12" (18" equiv.)		
Height	26″	31″	26″	31″	43.9″	47.24"		
Front Width	15.4″	19.1″	15.4″	19.1″	19.1″	19.1″		
Rear Width	_	13.9″	_	13.9″	13.9″	13.9″		
Depth	14.8″	18.1″	14.8″	18.1″	18.1″	18.1″		
Weight	46 lbs.	75 lbs.	51 lbs.	83.6lbs.	111.25 lbs.	132 lbs.		
Enclosure	Composite molded	Baltic birch ply	Composite molded	Baltic birch ply	Baltic birch ply	Baltic birch ply		
Enclosure Geometry	trapezoidal	trapezoidal	asymmetrical	trapezoidal	trapezoidal	trapezoidal		
Mounting Methods	Pole & Integral M10 mounting points	Floor applications only	Pole & Integral M10 mounting points	Pole mount	Floor applications only	Floor applications only		
Male XLR Signal pass-through	_	_	yes	yes	yes	yes		
Level Control	_	_	yes	yes	no	yes		
Timed Auto Turn-Off	_	_	yes	no	no	no		
Power On, Signal Present,			yes, yes,	yes, yes,	power on/	yes, yes,		
Limit and Thermal LEDs	_	<u> </u>	yes, yes!	yes, yes!	OL	yes, yes!		
Low Cut Filter	_	_	100Hz/2nd order	_	_	_		
Mic Preamp input	_	<u> </u>	yes			_		



\$62/\$63

6-Channel Rack-Mountable/Standalone Powered Mixers



The S62 and S63 are ideal all-in-one device for recording, live concert and contracting applications. Built tough for reliable performance and long life, they feature 6 electronically balanced mic/line inputs (XLR and 1/4" connectors), a CD/tape input (phono connectors), switchable 48v phantom power, internal reverb, an Aux send and return, along with amp in and preamp and monitor out patch points. Rugged and versatile, they easily

integrate into a variety of installations such as small clubs, theaters, schools, restaurants and houses of worship. Like all Samson's powered mixers, they combine comprehensive mixing and powering capability with extensive EQ and a wide range of useful features.

The S63 steps up with more power, 3-band EQ on each channel and a 10-band master graphic EQ that lets you "tune" the unit to particular environments, eliminating feedback problems.

- ◆ 6 channels with balanced XLR mic/line inputs for each channel allows you to blend a variety of source signals, including mics, keyboards, CD players, etc.
- ◆ Balanced XLR connectors (for mic inputs) and electronically balanced 1/4" jacks (for line-level inputs) for each channel; there is also a dedicated CD/Tape input that provides dual phono (RCA) jacks.
- ◆ 48v phantom power for mic inputs
- ◆ Clean, high-quality amplifier, delivers 150 watts into 4 ohms. Any standard speaker (2, 4, 8, or 16- ohms) can be connected to the rear-panel 1/4" speaker output jacks.
- ◆ A built-in three-spring reverb unit allows you to add reverberation effects to your vocals or instruments without having to use an expensive external signal processor. Front-panel reverb master volume control lets you precisely define the amount of reverb to be added to the signal.
- 2-band EQ on each channel enables you to shape the sound of your input signal sources

- ◆ Two Effects sends per channel (one pre-fade and the other post-fade) allow you to route multiple signals to the internal reverb unit or to external signal processors with a single front-panel control for the two. The pre-fade send (Effects send 1) can be used as a Monitor control, allowing you to set up an onstage monitor mix that is independent of the main house mix. A separate Monitor level control is provided on the front panel.
- ◆ In addition, a five-band graphic master EQ allows you to "tune" the output of the S62 to the particular room environment you are in. This can be particularly useful for eliminating ringing or feedback problems.
- Master Protection and Peak LEDs shows you at a glance when the internal amplifier is overloading.
- Protection relay circuitry prevents "thumps" when powering on or off. Allows you to use the S62 with a single power strip into which other audio devices are connected, without danger of damage to connected speakers.
 - ◆ 2 speaker outputs
 - ◆ Portable design with tough reinforced corners and a carry handle. Can also be rack-mounted (3RU high) allowing integration into any setup. Supplied with rack ears.

S63 Step-up Features:

- Clean, high-quality amplifier delivers 200- watts into four ohms. Any standard speaker cabinets (two, four, eight, or sixteen ohms) can be connected to the rear-panel 1/4" speaker output jacks.
- ◆ 3-band EQ on each channel lets you shape the sound of your input signal sources.
- ◆ 10-band graphic master EQ allows you to "tune" the output of the S63 to the particular room environment you are in.
- ◆ Independent input Trim controls for each channel allows you to precisely set the correct input gain.
- A rear-panel amplifier input allows you to bring external signals from other mixers or audio devices into the SS63 power amplifier
- Rear-panel preamplifier output lets you connect the S63 to external power amps when more power is required and/or when additional amp feeds are necessary.
- ◆ 2 Aux sends per channel
- ◆ 2 stereo returns with dedicated level controls for outboard effects
- ◆ Master monitor and reverb level controls
- ◆ Front-panel LEDs show the current status of the amp's protection relay circuitry and whether phantom power is being applied.
- ◆ Portable design with tough reinforced corners and a carry handle. Can also be rack-mounted (4RU high) allowing integration into any setup. Supplied with rack ears.













S83



- ♦ 8 channels with balanced XLR mic/line inputs for each channel
- ◆ Clean, high-quality amplifier, delivers 300 watts into four ohms. Any standard speaker cabinets (two, four, eight, or sixteen ohms) can be connected to the rear-panel 1/4" speaker output jacks
- ◆ 4-band EQ on each channel lets you shape the sound of your input signal sources
- ◆ Peak LEDs for each channel show you at a glance when an input signal is on the verge of overloading. Other front-panel LEDs show the current status of the amplifier's protection relay circuitry and whether or not phantom power is being applied.

8-Channel Rack-Mountable/ Standalone Powered Mixer

Fully loaded in terms of features and performance, the S83 steps up with 8 mic/line inputs, 300-watts of power into 4 ohms, 4-band EQ on each channel, front-panel output level meter, and headphone amp. The S83 also includes enough Sends and Returns so you always have adequate mixing capability.

- ◆ Four Effects returns give you the ability to blend in the return signal from external signal processors or other line-level devices without having to utilize input channels. Two front-panel Effects return level controls (one for Effects returns 1-2 and the other for Effects returns 3-4) allow you to bring in stereo signals, which are then automatically mixed together in mono. In the S63, two Effects returns are provided, with a single front-panel control for the two.
- ◆ Built-in headphone amplifier, with a front-panel 1/4″stereo connector and dedicated level control allows you to monitor your main mix
- ◆ Convenient front-panel meter let you see at a glance the continuous output signal level

PA324

Six-Channel Powered Mixer with 24-bit DSP Effects

The PA324 is a compact six-channel, 300-watt powered mixer with built-in 24-bit DSP effects. Optimized for live sound reinforcement and commercial installations, it handles up to six mic/line inputs with power to spare. The power amp section can run in three modes: two channel PA (150 watts per side), PA and monitor (150 watts each) or bridged for 300 watts of power. Each channel features a low noise, high quality mic preamp, 3-band EQ, monitor and effects sends, a level control and a 30dB pad on each of the six channels.



The onboard 24-bit DSP effects range from Hall, Room and Vocal reverbs

to Chorus and Delay and can controlled via front panel footswitch jack. Other practical features include dual 7-band graphic EQ, tape in and out RCA connectors, Aux in, phantom power and dual 7-segment LEDs. Packaged in a rugged and reliable enclosure, the PA324 comes mounted in a durable carpet covered wood cabinet complete with corners and handle.

- ◆ Six mic/line inputs with 1/4" phone and XLR connectors
- ◆ Built-in, 24-bit DSP with 8 selectable presets including Reverb, Delay and Chorus
- ◆ Advanced circuit design, utilizing low noise operational amplifiers
- ◆ Three power operating modes: 2x 150-watts, or 150-watt main/150-watt monitor, or 300-watts bridged
- ◆ Low-noise mic pre-amps with 48v phantom power
- ◆ 3-Band EQ on each channel

- ◆ Effects and monitor sends on each channel
- ◆ Dual 7-band graphic EQ for Main/Monitor
- ◆ Tape/CD Input.
- Mounted in a durable carpeted wood cabinet complete with corners, convenient carrying handle and large rubber feet



TM300/500

6-Channel Stereo Powered Mixer

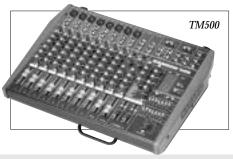
The TM300 is a practical, full-featured 6-channel stereo powered mixer with built-in signal processing in a compact table top design. The mixer can also be rack-mounted with the supplied rack ears. Ideal use in rehearsal studios, small club venues, lounge acts and other sound reinforcement applications, the TM300 can be used wherever there are a number of microphone or line-level sources that need to be mixed down to a stereo output. Simply hook it up to a set of PA speakers and you're ready to go.

The TM300 features a comprehensive mixer section with extensive routing and metering capability. Stereo power amp produces 150 watts a side into 4 ohms and uses a fan-cooled, bipolar design for greater stability and long life. A built in DSP section provides 3 different preset effects. 3-band EQ is complemented by a dual 7-band graphic EQ for more sonic control.



- ◆ Six independent channels, each with XLR mic and electronically balanced 1/4" line inputs. A dedicated stereo Tape input provides dual phono (RCA) jacks.
- ◆ Flexible switching allows the TM300 to be used either in standard stereo configuration or in a unique "split mono" mode, where it can drive both main PA speakers and onstage monitors simultaneously.
- ◆ Built-in stereo power amplifier delivers 150 watts per side into 4 ohms. Any speaker cabinet (4, 8, 16-ohms) can be connected to the four rear-panel 1/4" output jacks.
- ◆ Amp utilizes a variable-speed fan and bipolar design for maximum reliability and long life
- ◆ Onboard digital signal processor (DSP) with three high-quality effects
- ◆ 48v phantom power for mic inputs
- ◆ Two Aux sends per channel (one pre-fader and the other post-fader) allow you to route multiple signals to the internal DSP or to external signal processors
- ◆ Dual stereo aux returns—with dedicated front-panel level controls—give you the ability to blend in the return signal from the internal DSP and/or external signal processors or other line-level devices without having to utilize input channels

- ◆ 3-band EQ for each channel, with 15 dB of cut or boost for low (100 Hz) and high (10 kHz) frequencies, and 12 dB of cut/boost for the mid (1.8 kHz) frequency
- ◆ In addition, a dual 7-band graphic master EQ allows you to "tune" the TM300's output to the particular room environment you are in —ideal for eliminating ringing or feedback problems. The graphic EQ can be used in stereo or can be "split" so that one side affects the main PA and the other side affects stage monitors
- ◆ Constant level Pan controls for each channel that allow you to precisely place each input signal in the left-right plane
- ◆ Center detents for all Pan and EQ controls, makes it easy to use the TM300 even in lowlight live performance situations
- ◆ Continuously adjustable wide-range input Trim controls for each channel allow you to precisely set the correct input and output gain structure



- ◆ Independent 65mm faders for each channel and for the stereo bus
- ◆ Pre Fader Listen (PFL) soloing for each channel, allowing headphone monitoring of individual channels, pre-fader (but post-EQ) without affecting the signal being output either by the speaker or various line-level outputs.
- ◆ Front panel ten-segment level meter allows you to view at a glance the continuous levels of the main stereo output and/or Aux sends
- ◆ Peak LEDs for each channel show when an input signal is on the verge of overloading
- ◆ Dedicated status LEDs show main power and phantom power on/off
- ◆ Separate Record out jacks (with dedicated level control) allow you to directly connect the TM300 to any tape recorder. In addition, a handy Mono output jack provides a line-level signal for connection to external monitor power amplifiers.
- ◆ An independent front-panel headphone output with dedicated volume control for private monitoring of the main stereo output, Aux sends, or soloed channels.
- ◆ Main inserts and four channel inserts allow you to use outboard signal processors such as equalizers, compressor/limiters, or noise gates in a standard "effect loop."



EXPEDITION EXPRESS

All-In-One Portable PA System

Expedition Express is the total solution to professional sound, made portable. It gives you everything you need to make a professional presentation anywhere you can roll it. Expedition Express is a great solution for performers on the move. Bands, mobile DJ's, schools, houses of worship, corporate A/V and institutional applications-anywhere portable, high quality sounds required.

Unlike most portable PA systems, the Expedition
Express is designed to sound great. Not just for public
speaking either—but for live and recorded music, too.
The system is comprised of a pair of rugged, acoustically
balanced two-way loudspeakers, a 4-channel mixer with
DSP, a powerful 250-watt amplifier and all the accessories you
need. What's more, the system interlocks, and packs up into a
single rolling unit so it's easy to transport.





The Expedition Express combines a powered speaker with built-in amplification and controls, and a light-weight second speaker or "slave". When set up for performance, the two cabinets are connected by a single cable. When they are packed of for the road, the lightweight passive speaker cabinet locks into the top of the amplified speaker cabinet with a unique auto-locate mechanism. Each loudspeaker is housed in a lightweight, yet heavy-duty, molded resin cabinet with extensive internal bracing to give it rigidity, low resonance and the maximum possible volume.

Pro Quality Electronics

The Expedition Express's integrated 250-watt amplifier is perfectly matched to the drivers for surprisingly high efficiency. The sound is clear and hard-hitting. Built-in digital signal processing (DSP) adds dramatic pro-quality effects like reverb and echo at the flip of a switch. Selecting from six preset effects makes getting great sound easy and fast.

- → It features custom designed high and low frequency drivers. The High Frequency section employs an elliptical wave-guide horn that offers extra wide dispersion for maximum coverage.
- *With molded-in handle and wheels, you can roll the cabinet anywhere you want. This makes Expedition Express ideal for boardrooms, classrooms and fitness studios, either as a portable speaker or mobile all-in-one sound system.
- → The Expedition Express takes the guesswork out of public presentations. Everything you need is in one package: Speakers, built-in mixer with DSP, Samson microphone and all the cables. Best of all, you don't have to be an engineer to hook it all up. Sets up (and packs up) in less than five minutes.

ACCESSORIES -

Rechargeable Battery

Optional Wireless Module

The Expedition Express is prewired to accept Samson UM-1 or Micro 32 Series wireless mics.

Built-in Cassette Player/Recorder34.95



EXPEDITION PRO SERIES



Three Enclosures, Unlimited Possibilities

The Expedition series are versatile two-way loudspeaker enclosures with Celestion woofers, telescoping handle and locking wheels, available in three different versions: passive (XP100), powered (XP200) and powered with a built-in 4-channel mixer and digital signal processing (XP300).

Delivering huge sound with lots of headroom, a smooth top end and articulate bass response—without taking up much space, these loudspeakers represent smart solutions for clubs and performance halls, mobile DJ use, houses of worship, corporate A/V, fixed installations and any application where portable audio is required. Incredibly rugged, Expedition enclosures are injection-molded with Polypropylene construction with substantial internal bracing supporting the nearly 1/2" thick side wall construction. Convenient fly-points, a steel grille and a scuff-resistant textured finish ensure extreme versatility, ruggedness and dependable performance. To finish your system, a range of Expedition options are available including a rechargeable battery kit, a cassette recorder/player with pitch control and plug-in Samson VHF and UHF micro wireless systems.

XP100

The passive XP100 enclosure is housed in a sleek molded cabinet with substantial internal bracing to support its thick side wall construction. Designed to be lightweight and compact, the XP100 is still rigid enough to allow maximum energy to be transferred from the cabinet into the room. Two 1/4" Speakon connectors, convenient fly-points, a steel grill and scuff-resistant textured finish ensure exceptional versatility and long life.

The XP100 is a passive enclosure equipped with a custom designed, Kevlar-impregnated 12" Low Frequency driver with a 2.5" voice coil and a 49 oz. barium ferrite magnet to produce an accurate, super-tight bass response. The XP100's High Frequency section employs a 1"titanium compression driver along with an elliptical wave guide horn that controls dispersion. This in combination with a phasing plug produces a linear overall response with a clear, musical top end.

XP200

Using the same cabinet and speaker design as the XP100 the XP200 adds 200-watts of bi-amped power. It also includes an active crossover and built-in limiter with two XLR inputs. The XP200's power module gives you three stages of speaker protection, including relay switching for power up and power down. The onboard limiter circuit ensures a clean output even when you push it to maximum sound pressure levels. Because of its perfectly matched amplifier and speakers, the XP200 is particularly effective as a powered monitor. AC daisy-chain output for adding additional Expeditions enclosures in stereo, recording and presentation or performance applications.





EXPEDITION PRO SERIES



XP300

The most comprehensive version of Expedition, the XP300 is a powered loudspeaker with a built-in 4-channel stereo mixer and digital effects processing. Designed as a completely portable, all-in-one PA system, the XP300 is ideal for people who want superior audio anywhere they go. Whether you just want rugged and versatile loudspeaker enclosure that consistently deliver big sound, or a complete professional audio system in a highly mobile design perfect for today's fast-paced world, the XP300 is the answer.

The XP300's mixer features two bands of equalization, two Mic/Line channels and a Stereo Channel with a mic preamp. In addition to a standard TRS stereo line input, channel three also has RCA inputs that allow you to easily interface a CD, Mini Disk or Tape player. The digital processing section consists of six high-quality presets that range from a touch of room ambience to lush, reverberant halls. Versatile and easy to use, the XP300's mixer has balanced XLR Left and Right outputs for daisy-chaining additional enclosures (XP200) in stereo, recording and presentation or performance applications. The mixer's output can be monitored via its multi-segment VU meter, and there is also an LED meter indicating power level available from the optional RB20/30 rechargeable battery cartridge.

Like the XP100/200, the XP300's enclosure is equipped with a custom designed, Kevlar-impregnated 12" Low Frequency driver with a 2.5" voice coil and a 49 oz barium ferrite magnet to produce an accurate, super-tight bass response. The XP300's High Frequency section employs a 1" compression driver along with an elliptical wave guide horn that controls dispersion. This in combination with a phasing plug produces a linear overall response with a clear, musical top end.

EX500 Active Subwoofer

The EX500 active subwoofer can produce 500 watts of power in tandem with a custom, heavy-duty 15" low frequency driver. It functions as an ideal complement to Expedition series cabinets, or any loudspeaker system, when the application requires a focused yet deep bass response. The built in stereo crossover lets you use the EX500 in mono or as a common subwoofer in a stereo system. It also features a steel grill and rigid corners for durability, as well as an integral pole mount for conveniently mounting Expedition cabinets.



db500a Active Monitor System



Inside the rigid custom designed cabinet is an exclusively designed 15" driver, matched with a 1.75" Neodymium high frequency driver, aimed through a 1" diameter horn. The dB500a features 500 watts of Class H power (400 watts low frequency/100 watts high frequency) and has a crossover designed for high SPL. The exclusive Optimax signal processing circuitry provides total speaker protection but won't cut the low end at high volumes, as similar speakers with sliding filters do.

The back panel has a built-in mixer-like preamp section with mic and line inputs, XLR connectors and level controls. Controls for the selectable low pass filter and Optimax processing are also included.

The dB500a speaker cabinet features an array of mounting options. Designed with floor monitoring in mind, they are also easily stacked or permanently installed. A 1¾ pole receptacle is built in, and 10 reinforced fly points are available.



EMX-62M/66M/68S/88S

Powered Mixers

Ideal for small-to-medium sound reinforcement applications such as solo performers, bands, houses of worship and corporate use, Yamaha's EMX series of powered mixers offer portability, simplicity, economy and reliability. They feature built-in amplification and onboard digital effects, including Yamaha's acclaimed reverb technology. Internal amplifiers deliver 200-400 watts of efficient power and contain proprietary YSP circuitry that tailors the response curve to match Yamaha Club Series speakers. They are housed in rugged high-impact molded enclosures, and since many of today's permanent and portable applications have less space —they can be rack-mounted for integration into any system or installation (optional rack-mounting kit required). This is also made possible by a highly efficient fan cooling system







EMX-66M

EMX62M

that ensures reliable, stable operation in just about any environment.

The six-input EMX62M features a single 200-watt (4 ohm) amplifier and built-in limiter to prevent damage from feedback or overload. Channels 1-4 have balanced XLR connectors with switchable pads and phantom power, plus balanced 1/4" jacks. Inputs 5 and 6 each include two unbalanced inputs. All channels contain 2-band EQ, plus independent monitor and effects sends. RCA connectors with separate level control for a tape recorder or a CD player are also conveniently located on the front panel. The unit also contains a professional quality 7-band graphic equalizer and eight digital effects. Offers solo performers and public speakers who need a really clean, simple system, all the creative control and power they need for small shows and events.

EMX66M

The 6-channel EMX66M has all the features of the EMX62M plus adds two mono 300-watt (4 ohm) amplifiers (600 watts bridged) that can drive two house speakers or; one can drive the house speaker while the other drives a monitor system, 3-band channel EQ, and two 7-band graphic EQs (mains and monitors) for feedback control and tone shaping.

EMX68S/EXM88S

The EMX68S features a 6-channel stereo design with two switchable 400-watt (4 ohm) amplifiers, an All Channel Mute switch and 16 builtin digital effects - based on the popular Yamaha SPX effects processors. The EMX88S is the same as the EMX68S, with the addition of an 8-channel stereo design.

Why a YAMAHA Powered Mixer?

So you've decided that you need a powered mixer, why should choose a Yamaha? Start with a solid reputation for professional quality based on more than 25 years experience in the field. And don't forget that Yamaha also makes some of the world's finest acoustic pianos, stringed instruments, wind instruments, drums, and electronic instruments as well as industry-standard sound reinforcement gear. In short, the Yamaha name is synonymous with leading-edge technology that also embodies a unique sensitivity to the artistic needs of the musicians and performers who use it. But since we're talking about powered mixers, here is the main reason—superior sonic quality. Yamaha's engineers, sound specialists and instrument designers listen carefully to each product at every possible design stage, making changes and refinements that may not appear in the specifications, but that make an audible difference to the final sound.



EMX-62M/66M/68S/88S

Inputs

- ◆ Four mono XLR mic and 1/4″ line inputs. A global +15V phantom power switch is provided for the mic inputs, and an independent pad switch on each channel allows input level matching.
- ◆ Channels 5 and 6 provide the option of 1/4" TRS line level inputs channel or 1/4" Super Hi-Z instrument inputs optimized for direct input of acoustic and electric guitars and basses.
- Each input channel features level control and 2-bands of EQ (Hi/Low) as well as separate Monitor and Effect sends
- ◆ The Effects sends can be used to control the level to the internal effects (or an outboard effect processor)

Digital Effects

- ◆ Choice of three high-quality digital reverb effects (vocal reverb, large hall, small hall) to add ambience and depth to your sound.
- ◆ Separate Effect Returns are provided for the main and monitor sections.

Main Section

- Main section Master control adjusts the overall level of the main house sound
- ◆ A 5-segment LED level meter is provided as well as a LED Limiter indicator that tells you when the internal limiter circuitry is active due to power amplifier overload
- ◆ 7-band graphic EQ provides flexible sound-tailoring and feedback control for the main output.
- ◆ 1/4" Aux In jack allows the signal from an auxiliary source or sub-mixer to be mixed into the main program.
- ◆ 2TR (RCA) input, with a dedicated level control, can be used to mix the output from a tape deck or other stereo source into the main outputs.
- ◆ 1/4" main output can be used to drive an external power amp or sound system from the main program.
- ◆ The dual RCA Rec Out jacks delivers the main mix signal to an external recorder

Monitor Section

- ◆ A Master control knob adjusts the volume of the monitor output
- ◆ 1/4" monitor output delivers a line-level signal to an external sound system.

Output Section

- ◆ 1/4" speaker 1 and 2 outputs allow connection of two 8-ohm speakers or a single 4-ohm speaker
- Yamaha Speaker processing switch for smoother high frequencies and enhanced low-end output from Yamaha speakers
- ◆ A 1/4" headphone output is also provided

Conveniences

- ◆ 1/4" Effect output delivers the signal from the channel Effect send controls to an external effect processor
- ◆ A 1/4" jack accepts an optional FC5 foot switch to turn the effects on or off

EMX66M Adds

- ◆ A 3-band EQ (Low, Mid and Hi) is provided for each input channel
- ◆ XLR and 1/4" TRS inputs on channels five and six
- ◆ 8 effects programs including Vocal Echo and Plate
- ◆ Two 300W amplifiers (4 ohms) can be operated in three modes: Main + Main; Main + Monitor; Main Bridged

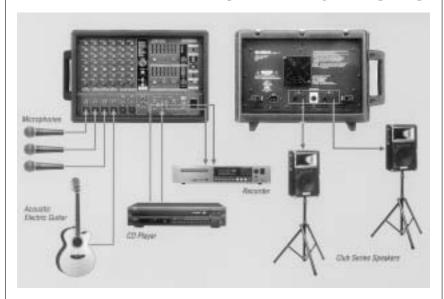
EMX68S Adds

- ◆ Two 400W amplifiers (4 ohms) can be configured for left and right Stereo Main outputs; Main (L+R) + Monitor outputs or Main (L+R) Bridged
- ◆ Pan controls are provided for each input channel
- ◆ Channels five and six can each be used as stereo line or mono mic inputs
- ◆ The 1/4" Auxiliary inputs, RCA Tape inputs and Record outputs are all configured for stereo operation
- ◆ SPX 32-bit digital effects processor and 24-bit A-D-A converters with 16 programs including Reverb, Gated Reverb, Echo, Delay, Vocal Doubler, Flanger, Distortion and more
- ◆ A second 1/4″ FC5 compatible footswitch input is available for used as a Tap
 Termpo control for the effects processor
- ◆ A Standby switch allows you to instantly mute all inputs except for the Tape Inputs

EMX88S Adds

◆ Two additional XLR mic 1/4" line inputs are provided for a total of six mono inputs and two stereo/mono inputs

YAMAHA MIXERS APPLICATIONS





EMX5000

Powered Mixers

If your show demands serious input capacity and power, the 12- channel EMX5000-12 or the 20-channel EMX5000-20 will probably do the job with performance to spare. Both feature a 500-watt per channel multi-mode stereo power section that will fill even fairly large venues with outstanding sound. And although they're integrated powered mixers designed with convenience and portability in mind, both models deliver features and performance that will satisfy even the most discerning performers and sound engineers.



FEATURES

Input Channels

- ◆ Available in 12 channel (8 mono and 2 stereo) and 20 channel (16 mono and 2 stereo) configurations
- The mono input channels offer a choice of balanced XLR mic and 1/4" TRS line inputs as well as 1/4" TRS insert points for insertion of external compressors, equalizers, or other processing gear
- ◆ Balanced 1/4" TRS and unbalanced RCA inputs are provided for the stereo input channels
- ◆ Each input channel features an input gain control, a high-quality linear fader for controlling levels; a Pan control; a PFL solo switch for monitoring individual channels; signal and peak LEDs; two Effect sends; Aux 1 and Aux 2 send controls with pre/post fader switching; and a Channel ON switch for muting individual channels
- ◆ Mono input channels also feature a 26 dB pad, 3-band EQ with sweepable mid band as well as a switchable 80Hz high pass filters for elimination low-frequency noise and rumble - stereo channels have a 3band EQ with a fixed mid band
- ◆ The two Effect sends controls can be used to feed a channel's signal to the dual highperformance internal effect systems, or to outboard effect processing gear

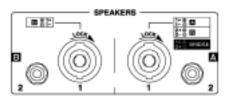
- ◆ 48V phantom power is switchable in groups of 8 channels for using condenser mics
- ◆ Dual 1/4" TRS Stereo Aux inputs with level controls and PFL switches allow convenient connection to sub-mixers or other stereo sources
- ◆ Unbalanced RCA 2 track inputs with level control can be used to mix the output from a tape deck or other stereo source into the main and monitor outputs
- ◆ Unbalanced RCA record output jacks allow you to route the main stereo program signal to an external recorder

Dual Effects Processor

- ◆ Each processor offers a selection of 16 professional-quality SPX digital effects
- ◆ A parameter control for each processor can be adjusted to tailor the effect. Settings are memorized for each effect program
- ◆ A Tap-delay button makes it easy to produce tempo-synchronized delays
- ◆ 1/4" TRS Effect Send jacks allow you to route the signal from an channel's Effect send control to an external effect processor
- ◆ Aux 1 and 2 send controls adjust the amount of effect signal sent to the auxiliary buses

Outputs

- ◆ 1/4" outputs for Aux sends 1 and 2 deliver the corresponding auxiliary signal for external processing or monitoring
- ◆ 1/4" stereo outputs can be used to drive an external power amplifier or sound system from the main program
- ◆ 1/4" power amp input connectors facilitate the insertion of external equalizers or other processors into the main program
- ◆ Stereo 1/4" Sub outputs controlled by a level control, above the mains fader, allows sub-mix cascading to a second mixer
- ◆ A 1/4" mono subwoofer output is provided featuring a switchable low-pass filter with a screwdriver adjustable cutoff frequency variable from 80 to 120Hz



- ◆ High-quality SPEAKON speaker connectors for fast, reliable connection. 1/4" jacks are also provided
- Headphone output jack with independent level control



EMX5000

Master Section

- ◆ A Stereo master fader with both PFL and AFL switches
- ◆ Linear Aux 1, Aux 2, and Mono Out master faders with AFL (after-fader listen) monitor switches
- ◆ Precise 12-segment stereo level meters
- A 9-band graphic equalizer with ON switch provides flexible soundtailoring and feedback control
- ◆ Linear Effect return faders with PFL and ON switches

- ◆ A Power amplifier output selector allows selection of 500, 300, or 100 watt output per channel
- ◆ A Power Amp mode selector allows the two-channel power amplifier to be quickly configured for Main + Main, Mono + Aux 1, Aux 1 or Aux 2, or Bridged operation
- Internal limiter circuitry with LED indictors help control power amplifier overload
- A Yamaha Speaker processing switch delivers smoother high frequencies and enhanced low-end output from Yamaha speakers

Conveniences

- ◆ A Stand-by switch allows you to instantly mutes all mono inputs
- ◆ Foot Switch jacks
 accept optional
 FC5 foot switch to
 turn the effect 2 on or
 off, and tap in the tempo for
 the tempo delay effect "on the fly"
- ◆ Carrying handle doubles as an armrest for extra control comfort
- ◆ Top Panel BNC Lamp socket

	EMX SERIES SPECIFICATIONS								
	EMX62M	EMX66M	EMX68S	EMX88S	EMX5000-12	EMX5000-20			
Maximum Output Power @0.5% THD at 1kHz	200w/4Ω 135w/8Ω	$300 w + 300 w / 4 \Omega$ $205 w + 205 w / 8 \Omega$ $600 w / 8 \Omega$ bridge	400w+400w/4Ω 270w+270w/8Ω 800w/8Ω bridge	400w+400w/4Ω 270w+270w/8Ω 800w/8Ω bridge	$500w+500w/4\Omega$ $325w+325w/8\Omega$ $1000w/8\Omega$ bridge	$500\text{w}+500\text{w}/4\Omega$ $325\text{w}+325\text{w}/8\Omega$ $1000\text{w}/8\Omega$ bridge			
Input Connectors	CH 1-4: XLR & TRS phone CH5, 6: 2x TRS phone	CH 1-4: XLR & TRS Phone CH5, 6: XLR and 2x TRS phones	CH 1-4: XLR & TRS phone CH5, 6: XLR and 2x TRS phone	CH 1-6: XLR & TRS Phone CH7, 8: XLR and 2x TRS phones	CH 1-8: XLR & TRS phone CH9/10, 11/12: 2x phones & 2x RCA pins	CH 1-16: XLR & TRS Phone CH17/18, 19/20: 2x phones & 2x RCA pins			
Channel Inserts	_	_	_	_	8 (mono channels)	16 (mono channels)			
EQ (Mono CH) High	10kHz shelving	10kHz shelving	10kHz shelving	10kHz shelving	10kHz shelving	10kHz shelving			
EQ (Mono CH) Mid	_	2.5kHz peaking	2.5kHz peaking	2.5kHz peaking	250Hz-5kHz peaking	250Hz-5kHz peaking			
EQ (Mono CH) Low	100Hz shelving	100Hz shelving	100Hz shelving	100Hz shelving	100Hz shelving	100Hz shelving			
EQ (Stereo CH) High	_	_	10kHz shelving	10kHz shelving	10kHz shelving	10kHz shelving			
EQ (Stereo CH) Mid	_	_	2.5kHz peaking	2.5kHz peaking	2.5kHz peaking	2.5kHz peaking			
EQ (Stereo CH) Low	_	_	100Hz shelving	100Hz shelving	100Hz shelving	100Hz shelving			
Aux Sends	2 (1 monitor,1 effect)	2 (1 monitor,1 effect)	2 (1 monitor,1 effect)	2 (1 monitor,1 effect)	4 (2 AUX [pre-Post], 2 effect)	4 (2 AUX [pre-Post], 2 effect)			
Phantom Power	+15V	+15V	+15V	+15V	+48V	+48V			
Graphic Equalizer	7 band	7 band	7 band	7 band	9 band	9 band			
Digital Effects	3 programs	8 programs	16 programs	16 programs	Effect 1 (16 programs),	Effect 2 (16 programs)			
Power Amp. Mode	Main	Main + Main, Main + Monitor, Main Bridge,	ST L + ST R, Main (L+R) + Monitor, Main (L+R) Bridge	ST L + ST R, Main (L+R) + Monitor, Main (L+R) Bridge	ST L + ST R, Aux1 + Mono, Aux 1 + Aux 2, MONO Bridge	ST L + ST R, Aux1 + Mono, Aux 1 + Aux 2, MONO Bridge			
Power Select Switch	_	_	_	_	500/300/100w	500/300/100w			
Meters	5 points (Main)	5 points (Main), 5 points (Monitor)	2x 5 points (Main), 5 points (Monitor)	2x 5 points (Main), 5 points (Monitor)	2x 13 points	2x 13 points			
Yamaha Speaker Processing	Yes	Yes	Yes	Yes	Yes	Yes			
Low Pass Filter		_	_	_	Yes (MONO OUT)	Yes (MONO OUT)			
Stand-by switch	_	_	Yes	Yes	Yes	Yes			
LAMP Connector		_	_	_	Yes (XLR 3 pins)	Yes (XLR 3 pins)			
Foot Switch	Effect On/Off	Effect On/Off	Effect On/Off, TAP	Effect On/Off, TAP	Effect 2 On/Off, TAP	Effect 2 On/Off, TAP			
Dimensions (WHD)	1815/16 x 12 x 121/8"	1815/16 x 12 x 127/8"	1815/16 x 12 x 127/8"	1815/16 x 12 x 121/4"	18 ¹³ / ₁₆ x 6 ¹ / ₄ x 21 ³ / ₁₆ "	26% x 6¼ x 21%6"			
Weight	26.5 lbs.	33.1 lbs.	34.2 lbs.	34.2 lbs.	33.1 lbs.	41.9 lbs.			



CLUB SERIES IV

Ideal for many applications including bands, clubs, church installations and small theaters, these rugged, durable performers have a proven track record. For over five years Yamaha Club Series IV speakers have been making performances everywhere easily heard by the audience and performers alike. Club Series IV speakers feature rugged steel handles, metal corner protectors, and heavy-duty steel grille for easy and secure handling. Two input jacks mounted on a metal jack plate allow for loop-through connections. Rugged carpet-covered, trapezoid-style cabinets allow seamless array arcs. Black carpet covering also helps them stand up to abuse without showing ugly "road rash."





S112IV and S115IV

12- and 15" 2-way Loudspeaker Systems

The S112IV and S115IV are trapezoid shaped cabinets, with oversize steel handles, steel corner protectors, steel jackplate with two heavy duty 1/4" jacks, and a built-in pole socket (1%") for easy stand mounting. The S112IV's 12" woofer is a high power, custom design, the S115IV's 15" woofer is a high power, cast aluminum frame, with a cooling port in the pole piece for extended high power handling. The high frequency driver on both the S112IV and S115IV is a custom 2" titanium diaphragm (1" exit) design with an exclusive phase plug that reduces harmonic distortion inside the driver itself. This driver is mated to a 90° x 40° constant directivity horn to give smooth, even coverage over the pattern of the horn. The internal passive crossover has protection circuitry to help guard against damage that may occur from over powering or sending clipping signals to the speakers.

SM10IV/SM12IV/SM15IV

10-, 12- and 15" 2-way Floor Monitor Systems

The SM10IV, SM12IV and SM15IV are are low-profile, (horn beside woofer style) floor monitor cabinets, with steel corner protectors, steel grille to protect the woofers, and a heavy steel jackplate with 2 heavy-duty 1/4" jacks. A 1%" pole socket is installed on the end of the cabinet for easy pole mounting, FOH (front of house) duty. They are covered in tough, abuse resistant black carpet.

Their low frequency driver is a high power, cast aluminum frame, with a cooling port in the pole piece for extended high power handling. The high frequency drivers are a custom, 2" diaphragm (1" exit) design with an exclusive

phase plug that reduces harmonic distortion inside the driver itself.

This driver is mated to a $40 \infty \times 90 \infty$ constant directivity horn to give smooth, even coverage over the pattern of the horn. The internal passive crossover has protection circuitry to help guard against damage that may occur from over powering or sending clipping signals (underpowering) to the speakers.





CLUB SERIES IV

S115IVA

Flyable 15" 2-way Speaker

The S115IVA is the same as the S115IV 15" 2-way speaker, except it has flying hardware tested and pre-installed in the cabinet. Steel strapping spanning these points inside the cabinet further ensures safety. Two 3/8"-



16 forged eyebolts are included.

S215IV

Dual 15" 2-way Speaker

The S215IV is a trapezoid shaped cabinet, with oversize steel handles, steel corner protectors, and a steel jack-plate with 2 heavy-duty 1/4″ jacks. Unique cabinet bracing for extra rigidity. Its covering is tough black carpet, and it has a heavy gauge perforated steel grille for driver protection. The woofers, or low frequency drivers are high power, Cast aluminum frame, with a cooling port in the pole piece for extended high power handling. The High frequency driver is a custom, 2″ diaphragm (1″ exit) design with an exclusive phase plug that reduces harmonic distortion inside the driver itself. This driver is mated to a $90 \infty \times 40 \infty$ constant directivity horn to give smooth, even coverage over the pattern of the horn.



SW118IV

18" Subwoofer

The SW118IV is a low profile subwoofer system. Using a cast frame 18° driver, it is capable of delivering powerful low frequency energy to augment smaller systems. It is one of the most cost effective ways to add extra bass to your system. Large, heavy steel handles make

transporting the SW118IV an easy one person job.

SW215IV Dual 15" Subwoofer

The SW215IV is a dual 15" subwoofer in a particle board enclosure (needed for rigidity). The drivers in the SW215IV are butyl surround, long travel, 3" voice coil, vented pole drivers.



They assure very high SPL (sound

pressure level) operation without damage or fatigue. The enclosure is rectangular in shape, and the baffle is designed to fold back in the center of the cabinet to form the port for this bass reflex design. This unique construction keeps the large top and bottom sheets that form the top and bottom of the cabinet from resonating. This makes the cabinet one of the most rigid boxes available today. Installed in the top of the cabinet is a metal socket that accepts a 1% diameter tube to allow satellite placement of another loudspeaker.

CLUB SERIES IV 'S' SPEAKERS



durable black polyurethane elasrior that creates a high-tech look

tomeric bonded exterior that creates a high-tech look and offers greater shock absorption. The durable, all-weather elastometric coating also has a low gloss, understated appearance that provides a professional appearance and allows the cabinet to be easily painted for integration into any environment. Like the Club IV

and Club IV-OAK, the Club S cabinets include dual 1/4" connectors, corner protectors and heavy-duty carrying handles. Heavy gauge, perforated steel grills provide additional component protection and guarantees years of great performance.





OAK SERIES IV

Speakers that look as good as they sound

Yamaha took high quality components and advanced engineering from the Club Series and placed them in

trapezoidal oak finish cabinets. Now, you can enjoy a

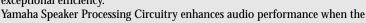
fine furniture appearance or paint the cabinets to match your specific surroundings.





CP2000 Power Amplifier

The CP2000 delivers a maximum 2000 watts of clean power into 4-ohm load when bridged. In a stereo configuration it delivers 1000 watts of power into 2-ohms, 650 watts into 4-ohm loads or 450 watts into 8-ohm loads. Yamaha's exclusive EEEngine technology, combined with a MOSFET amplifier allows the CP2000 to deliver high performance along with exceptional efficiency.



CP2000 is used with Club Series speakers. Limiter circuits (same as in Yamaha's high end H Series amps) provide optimum protection from hard clipping.

CP2000 features three output modes for maximum flexibility. The normal Stereo mode (separate input signals routed to independent channels with L/R signal control). Parallel Mode feeds a single input to two independent channels with L/R signal control, and Bridged Mono for extra high power output. Equipped with balanced XLR jacks and balanced 1/4" phone jacks for input connections, and 1/4" phone jacks and 5-way binding posts for speaker connections.



SE SERIES

The Se Series is a cost-effective, high-quality alternative for touring or small-to-medium size permanent systems. Combining Yamaha's advanced acoustics research with computer-controlled woodworking technology, they offer state-of-the-art components and rugged enclosures that will satisfy the requirements -and budget- of any consultant, contractor or engineer who needs a reliable PA system. Designed for optimal individual performance or as part of a system, each speakers includes a proprietary constant-directivity

horn coupled to a 1". 90° x 40° compression driver, which produces a flatter response, greater intelligibility and better overall performance than piezo-type tweeters. Each has a crossover frequency of 3 kHz, and are built to handle the power delivered by contemporary amplifiers.

In addition to dual 1/4" connectors, all Se Series speakers offer a host of roadworthy features including durable "carpet" finish, corner protectors and heavy-duty carrying handles. Heavy-gauge, perforated steel grills provide additional component protection and guarantee years of great performance and durability.



CLUB SERIES SPECIFICATIONS

Model	Woofer	Tweeter (diaphragm)	Frequency Response (-10dB)	Power Handling (noise*/program/peak)	Sensitivity 1W, 1m	Dimensions W x H x D	Weight (lbs.)
		C	LUB Series IV S	Series			
S215IV	15" Cast Basket (x2)	2″ Titanium	42Hz-16kHz	500/1000/2000	99	20 x 48 x 24"	108
S115IV/S115IVA	15" Cast Basket	2″ Titanium	55Hz-16kHz	250/500/1000	99	19 x 28 x 14"	61
SM15IV	15" Cast Basket	2″ Titanium	55Hz-16kHz	250/500/1000	99	28 x 19 x 14"	57
S112IV	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	25 x 16 x 14"	43
S112IV	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	26 x 25 x 13"	43
SM12IV	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	25 x 16 x 14"	43
SM10IV	10" Steel Basket	1" Phenolic	70Hz-20kHz	100/200/400	95	22 x 13 x 11"	27
		CI	LUB Series IV S	Series			
S115IVS/S115IVAS	15" Cast Basket	2″ Titanium	55Hz-16kHz	250/500/1000	99	19 x 28 x 14"	61
S112IVS	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	16 x 25x 13"	43
SM12IVS	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	25 x 16 x 14"	43
			Subwoofers				
SW118IV/118IVS	18" Cast Basket	n/a	30Hz-2kHz	250/500/1000	96	21 x 26 x 31"	71
SW215IV	15" Steel Basket (x2)	n/a	33Hz-2kHz	500/1000/2000	98	44 x 21 x 24"	141
			OAK Series				
S115IVA-OAK	15" Cast Basket	2″ Titanium	55Hz-16kHz	250/500/1000	99	19 x 27 x 14"	61
SM15IV-OAK	15" Cast Basket	2″ Titanium	55Hz-16kHz	250/500/1000	99	27 x 19 x 20″	57
S112IV-OAK	12" Steel Basket	2″ Titanium	60Hz-16kHz	150/300/600	97	16 x 24 x 12"	40
SM10IV-OAK	10" Steel Basket	1" Phenolic	70Hz-20kHz	100/200/300	95	21 x 12 x 15"	23
			SE Series		,		
S15e	15" Steel Basket	1" Phenolic	60Hz-14kHz	125/250/500	98	19 x 26 x 15"	44
S12e	12" Steel Basket	1" Phenolic	65Hz-14kHz	125/250/500	97	16 x 22 x 13"	32
S12Me	12" Steel Basket	1" Phenolic	65Hz-14kHz	125/250/500	97	22 x 15 x 18"	30
S10e	10" Steel Basket	1" Phenolic	70Hz-14kHz	100/200/400	96	16 x 21 x 13"	30

MS300 300-Watt Powered Speaker System

The MS300 is a 2-way speaker system that delivers high-quality, high-powered sound in a lightweight, easy to carry and setup unit. Each unit is equipped with an internal bi-amplified power system that delivers a total of 300 watts—225 watts to the 12" low frequency driver and 75 watts to the 2" high frequency driver.

It is also equipped with an easy to use but effective built-in mixer that provides independent MIC and LINE inputs, complete with a separate gain control on each input, a two-band EQ (Low, High) and a Master Volume control. The LINE input signal can be sent to other speakers via the Parallel output jack which allows the daisy chaining of multiple speakers. Equipped with a variable high cut frequency control to optimize integration of a subwoofer into a variety of sound systems. For true versatility, the MS300's design allows a wide range of setups since it is flyable, stackable and pole mountable right out of the box. It can even be used as a floor monitor when laid on its side. Optional mounting brackets allow the MS300 to be mounted on the wall or from the ceiling.



